

SR 77-7



Special Report 77-7

Q

AD A 051813

SELECTED BIBLIOGRAPHY OF
DISTURBANCE AND RESTORATION OF SOILS
AND VEGETATION IN PERMAFROST REGIONS
OF THE USSR (1970-1976)

①

Martha Andrews

March 1977

AD No. _____
DDC FILE COPY

DDC
RECEIVED
MAR 24 1978
B
[Signature]

CORPS OF ENGINEERS, U.S. ARMY
COLD REGIONS RESEARCH AND ENGINEERING LABORATORY
HANOVER, NEW HAMPSHIRE

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

14 REPORT DOCUMENTATION PAGE		9 READ INSTRUCTIONS BEFORE COMPLETING FORM	
1. REPORT NUMBER Special Report 77-7	2. GOVT ACCESSION NO. CRREL-SR-77-7	3. RECIPIENT'S CATALOG NUMBER Special rept.	
4. TITLE (and Subtitle) SELECTED BIBLIOGRAPHY OF DISTURBANCE AND RESTORATION OF SOILS AND VEGETATION IN PERMAFROST REGIONS OF THE USSR (1970-1976).		5. TYPE OF REPORT & PERIOD COVERED	
7. AUTHOR(s) Martha Andrews		6. PERFORMING ORG. REPORT NUMBER	
8. CONTRACT OR GRANT NUMBER(s)		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS DA Project 4A161102AT24, Scientific Task Area 02, Work Unit 002 and DA Project 1Z865803M761	
9. PERFORMING ORGANIZATION NAME AND ADDRESS Martha Andrews INSTAAR University of Colorado, Boulder, CO 80309		11. REPORT DATE March 77	
11. CONTROLLING OFFICE NAME AND ADDRESS Directorate of Facilities Engineering Office, Chief of Engineers Washington, D.C. 20314		12. NUMBER OF PAGES 119	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclassified	
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE 12/12/80 p.	
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20; if different from Report)			
18. SUPPLEMENTARY NOTES Co-sponsored by CRREL Technical Information Analysis Center.			
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Bibliographies Geographic areas Permafrost Soils Vegetation			
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This compilation of literature published in Russian since 1970 comprises 898 bibliographic citations relating to disturbance and restoration of soils and vegetation. Seventy-five per cent of these were found by a manual search of CRREL Bibliography vols. 25-30; the others were obtained through off-line searches from the relevant computerized data bases and personal files. Only one of these data bases, that of the National Agricultural Library, is shown to be of significance in providing a valuable checking source. The literature is discussed in chronological fashion, with general statements followed by highlights of each year's contributions (with three tables and two appendices for amplification). The years 1972 and 1973 produced the most publications, and by 1975 there was			

037 100
du

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

20. Abstract (cont'd)

a noticeable lag in pickup of publications by the indexing services. A trend is apparent from a reconnaissance and description approach in earlier papers toward an integrated ecosystem approach in more recent publications. Certainly, increased consciousness of the effects of disturbance on the permafrost environment, and the importance of restoration and preservation of these environments, are reflected in the recent literature, particularly in symposium proceedings.

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

PREFACE

This bibliography was prepared by Martha Andrews, Research Bibliographer, Institute of Arctic and Alpine Research, University of Colorado. The work was funded by DA Project 4A161102AT24, Research in Snow, Ice and Frozen Ground, Scientific Area 02, Cold Regions Environmental Interactions, Work Unit 002, Cold Regions Environmental Factors; and by DA Project 1Z865803M761, Technical Information Analysis Centers (Cold Regions Information Analysis Centers). The project was under the direction of Dr. Jerry Brown, who offered much advice and many materials. Library facilities at INSTAAR, the University of Colorado, and the U.S. Army Cold Regions Research and Engineering Laboratory were used. Eunice Salisbury, CRREL librarian, provided much assistance with CRREL Bibliography materials, and Nancy Dumont, assistant librarian at CRREL, spent many hours developing search strategies and aiding with computer searches. The Institute of Quaternary Studies and the Dept. of Geological Sciences, University of Maine at Orono, kindly furnished space and equipment during the final preparation of the bibliography.

ACCESSION for	
NTIS	White Section <input checked="" type="checkbox"/>
DDC	Buff Section <input type="checkbox"/>
UNANNOUNCED	<input type="checkbox"/>
JUSTIFICATION _____	
BY _____	
DISTRIBUTION/AVAILABILITY CODES	
Dist. AVAIL and/or SPECIAL	
A	

SELECTED BIBLIOGRAPHY OF DISTURBANCE AND RESTORATION
OF SOILS AND VEGETATION IN PERMAFROST
REGIONS OF THE USSR (1970-1975)

by

Martha Andrews

Introduction

Soils and vegetation may be disturbed naturally or through human contact. Natural disturbance includes damage by fire, insects and erosion, with thermal erosion of permafrost a significant factor. Human disturbance is varied, road building, fire control, mining, oil spills, off road vehicles, logging and air pollution being the major culprits. Disturbance from any source causes existing vegetation to be damaged, killed and/or removed, and soils to change in moisture content, density, nutrient status, aeration and thaw depth.

Restoration or recovery of the damaged or disturbed ecosystem can also be either natural or man-induced. Revegetation and restoration of the disturbed site to its natural state may be partially or entirely successful, depending on many factors. Protection of sites in danger of disturbance may prevent both the disturbance and the need for restoration.

This bibliography of Russian literature covers the years from 1970 through the first half of 1976. Since the concepts of disturbance and restoration are relatively new as subjects of intensive study, the boundaries of the literature search in the earlier years were expanded to include selected literature concerning soils and plant ecology in both arctic and alpine areas which might relate to the desired subjects. In addition to the scarcity of disturbance and restoration studies in the earlier literature, there is a time lag among subject headings used in bibliographic indexing, i.e. the indexers tend to fit anomalous items into the existing subject thesaurus until it becomes evident that a new area of research has become established and is producing enough items to be indexed by new terms. Therefore, some earlier works may be lost temporarily in this manner to the person searching the standard bibliographies.

This Special Report is to be followed in 1977 by a complementary bibliography and report covering literature on the disturbance and restoration of soils and vegetation in permafrost regions of North America. The Russian literature will be updated at that time also.

CRREL Bibliography Search

The major body of this bibliography has been culled from volumes 25-30 of the CRREL Bibliography on Cold Regions Science and Technology, CRREL Report 12. The CRREL bibliography naturally provides the best reference in English to the Russian literature in fields appropriate to the CRREL mission. Only items published during or after 1970 have been included. The language used in these publications is restricted to Russian with the exception of some English translations and some English language summaries of recent symposia including Russian

materials. One or two items in Japanese about Yakutia have also been included. The area within the Soviet Union dealt with is wherever permafrost exists, either in a continuous or discontinuous condition. This large area includes zones variously defined as arctic, subarctic, tundra, taiga, alpine and subalpine.

In searching the CRREL bibliographies, I began by devising a list of subject headings used in them which I thought appeared relevant (Table I) and from which I started to trace references. It quickly became apparent that to search the volume of material involved, it would be much faster to scan each citation in its entirety. This of course meant scanning approximately 4000 citations for each volume of the CRREL bibliography, which was done at a rate of some 600 items per hour. Each item was marked, and appropriate subject headings were selected from those already selected by the original indexer of the publication. This aspect of selectivity in bibliographic work is important to emphasize. The experience and judgment of the bibliographers must be trusted as there is no quantitative or objective approach possible in indexing.

Main entry cards and subject-headed copies were made of the 678 items chosen. The subject index to this bibliography was not continued after vol. 28. This was due to the growing size of the bibliography which made me question whether a user would approach his own search through a regular subject index, or whether another kind of breakdown would be more useful. For the purposes of this report, it has been decided to discuss the references in a chronological fashion. Appendix I lists the authors publishing in each year to show the scope of each year's contributions and the development of key researchers in the field. The reader is referred to Appendix II for full citations, arranged alphabetically for the entire period (1970-1976).

In the subject indexes to volumes 25 and 26 of the CRREL bibliography very few terms were used to denote natural disturbance (thermokarst being one) and probably the only one denoting human disturbance was "environmental impact." By volume 27 "damage" was being used; volume 29 introduced "protection" (of natural environments) and included "human factors," "forest fires," and "revegetation." Reforestation had been used earlier. "Disturbance" has not been used and probably should be used in addition to "damage," which also includes damage to structures. "Restoration" or "recovery" should be used in addition to "revegetation," as for soil recovery, etc.

Material Not Yet Entered in the CRREL Bibliography

A certain number of items added to the bibliography came from personal materials in the office of Dr. Jerry Brown of CRREL. The bulk of these consisted of items for future addition or expansion (i.e. content analysis) in the CRREL bibliography.

Computerized Data Base Searches

Computerized searches were carried out on all relevant data bases available. The only one which appeared to produce anything significant that may have been overlooked by CRREL, or by me in searching the CRREL bibliography, was that of the

TABLE I
SUBJECT HEADINGS

Active layer	Permafrost transformation
Active layer thickness	Photosynthesis
Agriculture	Plant ecology
Alpine soils	Plant nutrition
Alpine vegetation	Plant physiology
Arctic soils	Plants (botany)
Arctic terrain	Podzols
Arctic vegetation	Protection
Bibliographies	Protective vegetation
Biomass	Reforestation
Clay soils	Revegetation
Clays	Sands
Cryogenic processes	Soil classification
Cryogenic soils	Soil composition
Damage	Soil erosion
Desert soils	Soil formation
Deserts	Soil microbiology
Ecology	Soil moisture
Ecosystems	Soil moisture migration
Environmental impact	Soil profiles
Environments	Soil structure
Forest ecosystems	Soil temperature
Forest fires	Soils
Forest soils	Subarctic vegetation
Frozen tundra	Subarctic soils
Frozen ground	Subarctic terrain
Fungi	Taiga
Geobotanical interpretation	Taiga forests
Grasses	Taiga regions
Ground ice	Taiga soils
Human factors	Taiga terrain
Kummocks	Taiga vegetation
Lichens	Thermokarst
Loess	Trees (plants)
Meadow soils	Tundra soils
Mosses	Tundra terrain
Mottled tundra	Tundra topography
Mountain soils	Tundra vegetation
Organic soils	Vegetation
Paleoecology	Vegetation factors
Palsas	Vegetation patterns
Patterned ground	Watererosion
Peat	Weathering
Permafrost heat balance	

National Agricultural Library (NAL). Of the 122 additions I have made from it to this bibliography, the bulk of the material is on soils and forestry and may appear in NAL for its agricultural relevance. CRREL may have chosen not to include these items because of their agricultural bias or because NAL already had covered them. It is also certain that some of the 122 items had been referenced by CRREL and missed by me, an indication of the value of a good cross-checking source

The computer searches have been broken down and analyzed as follows (see Table II).

A. Those generated from CRREL by Dr. Brown and Nancy Dumont

1. 7 July 1976. NTIS, DIALOG* Search File 6.
The search strategy was not available to me. Of the 35 items produced none was used.
2. 6 July 1976. SSIE, ORBIT III.
The printout was entitled Arctic Soils, although no search statement was included. SSIE indexes research projects underway rather than publications, so no citations were provided here.
3. 7 July 1976. GEOREF, ORBIT III.
The topic was Permafrost Regions, again without a search strategy included. Some interesting pre-1970 items were noticed, as were four items already included from CRREL. Four additions to the bibliography were made.
4. 27 September 1976. NAL/CAIN, DIALOG Search File 10.
Searched by C.N. Bebee for Nancy Dumont. The search strategy and list of descriptors are included. 312 items were printed, of which 14 were additions to the bibliography. The problem with the rest was that not all appropriate descriptors had been used, and the Russian emphasis was inadequate.

B. Those generated from Boulder, Colorado, searched by V. Schneller at NOAA with input from Martha Andrews and John Emerick from INSTAAR.

5. 10 May 1976. DIALOG and ORBIT Files. A similar search strategy (available) was used on four different data bases:
 - a. NAL/CAIN. 67 items printed. When I first scanned this list many items were marked for inclusion in the bibliography but cards were not made at that time. When I rechecked after using further sources for the bibliography, I was still able to add 12 items from this list. The authors found on this list were used in the later author search of NAL.
 - b.(1) BIOL. ABST. Inc. Eleven items printed. Seven were useful but I already had five of them, so one was added.

*DIALOG is the access program for the Lockheed system of computerized bibliographical data bases; ORBIT is the same for the SDC system. Some data bases (such as NAL/CAIN) are searchable on both systems.

TABLE II

A tabulation of the numbers of citations obtained from the computerized data bases, by year.

	1970	1971	1972	1973	1974	1975	1976	Total
GEORF (A.3.)*			3		1			4
NAL/CAIN (Lockheed) (A.4, B.5.a.)	1	1	4	8	9	3		26
Biol. Abst. Inc. (B.5.b.1, B.5.b.2)			1	1	1			3
NAL/CAIN (C.)	20	16	18	25	26	22	1	128
Total	21	17	26	34	37	25	1	161

*The letters and numbers following the data base names refer to their place of discussion in the text, pages ----.

- b.(2) BIOL. ABST. Inc. Nine items printed; since five had already been included, only one more was added to the bibliography.
 - c. NTIS. Seven items printed. None was added.
 - d. GEOREF. Twenty-eight items printed. Most relevant ones of these had been included on the earlier GEOREF search and nothing was added.
- C. A search generated from CRREL by Nancy Dumont with input from Dr. Jerry Brown and Martha Andrews. Searched on NAL/CAIN 23 September 1976 - ORBIT III. This was a search by author for every item published by that author and indexed at NAL. Our author list included all authors used from CRREL vol. 25-28, and the authors found from the earlier subject search of the NAL File (B.5.a.). The printout consisted of 1482 items listed on 27 different batch printouts arranged in no particular order other than a loose grouping according to letters of the alphabet. There were innumerable repetitions among the 1482 items. One hundred and four items were identified as already having been included from the CRREL bibliography. However, this identification was provided from quite a casual check; if a systematic check had been made no doubt the number would have been much higher. In the end, after over 20 hours of work, 128 items were added to the bibliography from this list. Although it is probable that only a few of these items could be considered absolutely crucial to the completeness of the bibliography, many, many items chosen serve to round out or enhance the bibliography and it is felt that this was a worthwhile check.

The idea of a search by author seems valid also, given the selective nature of subject indexing by possibly inexperienced indexers for the data bases, and also the fact that searching for subject within a particular geographic or physiographic area on the computerized data bases is still a primitive art. Experienced scientists often use authors in searching the literature as they know who is prominent in their own fields. However, it did become evident that a certain number of prolific authors had really only contributed in a small way to the subject of the bibliography.

Analysis of the Bibliography

This analysis traces developments (as reflected in the published results) in research relating to disturbance and restoration of soils and vegetation in Soviet permafrost regions. As was mentioned above, many of the earlier papers chosen for inclusion may be only of peripheral interest by comparison to those available later. The method of subdivision chosen to facilitate this type of discussion was to divide the 898 bibliographic citations into year of publication, and further to divide each year according to source of the citation (see Table III). Virtually none of the original papers have been seen by me; the discussion is based purely on information given in the titles and in the subject indexing provided at the source.

TABLE III

A tabulation of the numbers of citations from each source, by year.

	1970	1971	1972	1973	1974	1975	1976	Total	Per cent
CRREL	85	125	179	161	87	36	5	678	75
Computer Searches	21	17	26	34	37	25	1	161	18
J. Brown	0	6	0	4	5	24	20	59	7
Totals	106	148	205	199	129	85	26	898	
Per cent	12	16	23	22	14	9	3		~ 100

1970

A. 85 items chosen from the CRREL bibliography. About half of these titles are of a descriptive nature, concerned with the characteristics and distribution of plants and soil. The others are more process-oriented, examining interrelationships in plant communities, biological productivity, experiments in alteration of plant growth, and other topics noted below.

Papers of special interest include:

1. A collection entitled Biological basis for the utilization of natural resources in the north with notable papers by V.N. Andreev, I.I. Shamanova, and V.F. Shamurin. The last of these is the earliest study of tundra disturbance picked up for the bibliography.

2. Another volume of collected papers is entitled Productivity of subarctic biogeocenoses, proceedings of a symposium on exploration, rational exploitation, and preservation of natural resources in the far northern USSR. Papers by V.V. Kriuchkov and M.S. Zuznetsova study the components of tundra ecosystems.

3. B.F. Kosov treats soil erosion and thermokarst in a paper on ravine development in tundra.

4. M.S. Boch's paper is a quantitative evaluation of the relationship between soil and vegetation on the tundra.

B. 21 items chosen from the computerized data bases. The trends shown in these titles are similar to the above. Noteworthy papers include:

1. V.N. Drachkov on the effect of mice and birds on spruce reforestation.

2. B.P. Kolesnikov on studies of phytoreclamation of industrial dumps.

3. R.V. Kovalev on replanting.

1971

A. 125 items chosen from the CRREL bibliography. Descriptive literature ranges from discussion of vegetation types and geographical distribution of flora to research reviews and studies of vegetative resources. The more analytical papers discuss biomass, correlation of soils and phytocoenoses (M.L. Ramenskaia), boundaries within the tundra (V.D. Aleksandrova), and modeling in biogeocenology (I.IA. Liepa). Papers on biological productivity are frequent and include three (K.N. Manakov, N.L. Chepurko and A.D. Egorov) from a work Biological productivity and mineral cycling in terrestrial plant communities. Natural regeneration of taiga and alpine forests is a frequent subject of papers, but it is not clear whether the regeneration discussed is normal or because of damage. Protective vegetation has also been researched. Soils papers include discussions of thermal characteristics, the effect of ice formation on vegetation, and agricultural utilization of soils. The general trend noticed for 1970 continues, with several symposium type volumes reflecting interest in revegetation and conservation:

1. Biogeocenoses of Taymyr tundra and their productivity (vol. 1) has interesting titles by I.V. Ignatenko, IU.I. Chernov and N.V. Matveeva.
2. Biological problems of the north.
3. Conservation in Yakutia, 5th, Irkutsk, with papers by I.P. Scherbakov, V.M. Mikhaleva, and R.V. Chugunova on reforestation.
4. Introduction of new types of useful plants in the Far North, with papers by G.W. Golovkina and G.N. Andreev.

In addition to these collections, two papers by V.V. Kriuchkov on the causes of tundra treelessness are of interest for revegetation.

B. 17 items chosen from computerized data bases. This material concentrated mainly on soils, with the paper by I.V. Vereshchagina being of particular interest.

C. 6 items from the office of Dr. Jerry Brown. IBP Tundra Biome Translations 1, 4, 5 and 6 are here, with 2 and 3 already included from the CRREL bibliography.

1972

A. 179 items from the CRREL bibliography. There was a sharp jump in the number of relevant items this year. The quality and quantity of symposium volumes highlights increasing interest in the subjects of damage and restoration, as do several publications in primary journals. In general, isolated publications seem to have declined in favor of collected works with a central theme:

1. Study of tundra and forest-tundra biocoenoses includes several good titles: one by B.P. Kolesnikov on revegetation on developed lands, one by IU.I. Chernov on soil invertebrates, and one by V.N. Andreev on the effect of human activities on vegetation.
2. IBP Tundra Biome: Proceedings, IV International meeting on the biological productivity of tundra (Leningrad). All titles promise substantial background information, and the paper by E.V. Dorogostaiskaia on the influence of man on vegetation and ecosystem development seems particularly useful.
3. Soil and vegetation of permafrost regions in the USSR, 5th Symposium on Biological Problems of the North, Magadan, Apr. 18-22, 1972. Several excellent titles here include E.B. Pospelova on the revegetation of mined areas and V.N. Andreev on the influence of human activities on tundra vegetation.
4. Soils and productivity of plant communities, vol. 1.
5. Soils and vegetation of the east European forest tundra, ed. by B.A. Tikhomirov.
6. Productivity and biological turnover in the biogeocenoses of the Kola Peninsula, by K.N. Manakov.
7. Murmansk region vegetation.

Notable individual papers include:

1. V.F. Tsvetkov on forest fires and young growth in lichen taiga.
2. S.M. Sannikov and M.V. Pridnia, separately, on natural forest regeneration after logging.
3. A.A. Shuzmov on taiga restoration.
4. V.S. Smirnov on forests suffering damage by humans.

B. 26 items from computerized data bases. Several of these are on forestry, including reforestation (L.A. Lamin), and on biological activity in soils. Notable are:

1. B.N. Likhonov on environmental conditions of development of oil and gas areas.
2. L.G. Grishina on soil mites.
3. V.V. Kriuchkov on problems of the reclamation of the Far North.

1973

A. 161 items chosen from the CRREL bibliography. In spite of a decline in the number of items, 1973 shares with 1972 the high point of publication in the fields of disturbance and restoration. Symposia continue to be prominent:

1. International Conference on Permafrost, 2nd, Yakutsk. Most papers are on soil, with items by A.P. Tyrtikov on permafrost and soil cover, and V.V. Kriuchkov on permafrost effects on the tree line.
2. Biogeocenoses of Taymyr tundra and their productivity, vol. 2.
3. Problems of the north, vol. 18. Several papers here have good titles, including one by V.V. Kriuchkov on the subarctic landscapes and ways in which they are affected by industrialization, and another by him on possibilities of transforming natural environments in the northern part of western Siberia. S.A. Strelkov discusses problems in natural preservation in the northern Kola Peninsula. Other titles indicate research on preservation of natural environments.
4. Natural characteristics of swamps in the Amur River area.
5. Productivity and structure of the vegetation in young pine forests includes a title by M.A. Boch on swamp preservation.
6. Natural conditions in West Siberia, vol. 4, shows a good title by B.F. Kosov on the development of gullies, including human factors involved.

Individual contributions in this year appear of very high quality:

1. L.S. Kozlovskaja on the role of invertebrates in swamp biogeocenoses.
2. A.D. Vakurov on revegetation after fire.
3. B.N. Golovkin on transplanting herbaceous perennials to the polar north.
4. S.S. Fedotov on natural revegetation of drained bogs.
5. V.I. Vasilevich on the effects of environmental factors on subalpine meadow vegetation.
6. IU.I. Uvarkin on thermokarst development in arctic tundra.
7. V. Ksenofontov on growing grain crops on permafrost.
8. V.V. Kriuchkov on the rational utilization of natural resources of the Far North.

B. 34 items chosen from the computerized data bases. A few notable titles turned up here:

1. D.I. Berman on soil invertebrates in winter in the taiga.
2. V.N. D'iakov on erosion after logging.
3. N.K. Talantsev on natural forest reseeding (regeneration).
4. D. Ch. Tsydypov on changes in vegetation due to grazing.

C. 4 items from the office of J. Brown. IBP Tundra Biome Translation 8 is included here as are two papers by IU.I. Chernov from Biogeocenoses of Taymyr tundra and their productivity, vol. 2, not itemized in the CRREL bibliography.

1974

A. 87 items chosen from the CRREL bibliography. A sharp decline in the number of publications takes place here; however, the quality remains good. A substantial addition to alpine studies is noted, with one symposium, 6th All-union conference on the study and development of alpine flora and vegetation, and a review article Ecology of alpine vegetation. State of the art.

Individual papers on alpine subjects include:

1. V.V. Smirnov on soil disturbance by engineering activities in the eastern Polar Urals.
2. I.K. Bulatova on successions in tundras.

Research on taiga areas shows many publications dealing with natural or artificial regeneration of vegetation. Symposia on taiga include:

1. Study and reclamation of swamps in the northwest European USSR with papers on soil invertebrates and reforestation.

2. Scientific-industrial conference on soil erosion in the Lake Baykal Basin, Oct. 9-11, 1974, abstracts.

3. Significance of forests in water preservation and environmental protection. Proceedings of the Conference.

4. Soils and productivity of plant associations, vol. 2, with a paper by L.G. Bogatyrev on dynamics of melting permafrost in tundra soils.

5. Two volumes of the 10th International Congress on Soil Science: Soil studies in Karelia and Soil cryogenesis.

6. Biological problems of the north, 6th Symposium. Studies relating to tundra areas were evident in three volumes: Vol. 4, Sporiferous plants, plant introduction and fodder production, with papers on plant introduction by A.S. Iakovlev, N.S. Kotelina, and A.A. Shvirst. Vol. 6, Soil science and earth resources, with soils papers by V.D. Vasil'evskaia, T.S. Zvereva, D.D. Savvinov, I.V. Ignatenko, L.G. Elovskaja, and L.G. Bogatyrev and one on forage crops on tundra by V.A. Pak. Vol. 7, Plant physiology and biochemistry, has one more paper on plant introduction, by B.I. Ivanov.

Individual papers of note include:

1. B.A. Iurtsev on steppe communities.

2. G.S. Konstantinova on thermal erosion.

3. B.N. Norin on ecosystems.

4. A.P. Tyrtikov on vegetational cover dynamics and permafrost development.

Two books also seem relevant:

1. Biogeocoenoses of taiga forests (Perm Region) by G.N. Simkin.

2. Swamps of the plains near the lower Amur River, by I.U.S. Prozorov.

B. 37 items chosen from the computerized data bases. Most of these items relate to soil formation and composition. A.A. Bogushevskii's book on soil reclamation in permafrost zones appears worthwhile. Two additional items from the 10th International Congress on Soil Science, vol. 8, turned up here: I.P. Gerasimov's New soil map of the USSR and E.N. Ivanova's Soil map of the arctic. Individual papers of note are A. Sakai on the characteristics of forests on permafrost, and V.F. Shamurin on insects.

C. 5 items from the office of J. Brown. Included here are Frozen ground and soil II and Permafrost and soil III as well as a volume by E.M. Naumov on taiga soil formation and IBP Tundra Biome Translation 10.

1975

A. 36 items chosen from the CRREL bibliography. This drastic decline in number of items must indicate an inevitable time lag in CRREL pickup of items. Again, the quality is good and many useful items are noted. Symposia still predominate:

1. IBP Tundra Biome: Proceedings V. Abisko. International meeting on biological productivity. Structure and function of tundra ecosystems. Included here are papers on the Russian IBP sites.

2. Botanical studies in Yakutia contains papers on vegetation classification and dynamics.

3. Flora, vegetation and vegetational resources of Transbaikal and adjacent areas, vol. 5.

Notable individual papers include:

1. V.V. Kriuchkov on new approaches to the problem of tundra treelessness.
2. S.V. Tomirdiaro on thermokarst-lake landscapes.
3. P.I. Mel'nikov on research in preservation of northern environments.

Research in alpine areas includes vegetation analysis, and a paper by IU.N. Krasnoshchekov on the influence of vegetation on soil thawing.

Several papers on taiga areas are relevant to disturbance and restoration:

1. A.D. Vakurov on forest fires.
2. T.N. Vstovskaia on plant introduction.
3. V.N. Khlebodarov on natural regeneration after logging.
4. N.G. Moskalenko on revegetation (also in translation).

B. 22 items chosen from the computerized printouts. Bogushevskii has written on soil reclamation again; B.P. Kolesnikov on problems of land recultivation, and G.S. Konstantinova more on thermal erosion of landscapes.

C. 24 items from the office of J. Brown. IBP Tundra Biome Translations 12 and 13 are here, as is CRREL Draft Translation 477 of Golovkin's 1973 paper on transplanting herbaceous perennials to the north. Also in connection with the IBP, Resources of the biosphere (synthesis of the Soviet studies for the International Biological Programme), vol. 1, has appeared, with particularly

interesting titles by Ghilarov, Malinowsky, Shamurin and Pozdnyakov. A preprint of summaries of papers for the Symposium on Geography of Polar Countries for the XXIII International Geographical Congress appeared with many papers on the effects of development on the northern environment.

What appears to be a landmark development in research on disturbances and restoration took place in the form of a Conference - Environment Protection in Relation to Economic Development of Permafrost Regions. The conference publication consisted of abstracts, of which four, that were not later translated, are noted under this year. The section on 1976, following, details the English translation of a major part of these abstracts.

1976

A. 5 items from the CRREL bibliography. The time lag in bibliographic work becomes even more evident here, with only five relevant works having appeared through the September 1976 CRREL monthly listing. Of these, the most notable is the CRREL translation of Moskalenko's 1975 paper noted above.

B. 1 item from the computerized printouts. No comment.

C. 20 items from the office of J. Brown. Nearly all of these are from the English translation of abstracts of the "Conference ..." discussed under 1975. If the titles and abstracts of these papers are indicative, their complete publication and translation will be of immeasurable significance in further studies of disturbance and restoration.

APPENDIX I: AUTHOR INDEX

(Number in parentheses indicates number of publications authored during the year)

1970

Akademiia Nauk SSSR	Kuznetsova, M.S.
Aleksandrova, N.M., et al.	Larina, T.G.
Aleksandrova, V.D. (3)	Lavrenko, N.N.
Andreev, V.N. (2)	Liverovskaia, I.T.
Andreev, G.N.	Manakov, K.N.
Archegova, I.B. (2)	Manakov, K.N. (2)
Boch, M.S., et al. (3)	Martin, IU.L.
Boch, M.S.,	Milhailova, R.P.
Chizhikov, P.N.	Moriakina, V.A. (2)
Derviz-Sokolova, T.G. (2)	Nikitina, Z.I., et al.
D'iakonova, AA (2)	Pak, K.P.
Kolukhanov, A.G.	Pavlova, T.S. (2)
Drachkov, V.N.	Pereverzev, V.N. (2)
Euks, I.I.	P'lavchenko, N.I. (2)
Filippova, L.N.	Popov, V.M.
Firsova, V.P., et al. (3)	Rebristaia, O.V.
Firsova, V.P.	Roichenko, G.I., et al.
Gauert, V.I.	Roizin, M.B. (2)
Getsen, M.V.	Roshchevskaiia, R.A., et al.
Golovko, E.A.	Rudneva, E.N.
Gorchakovskii, P.L.	Sannikov, S.N.
Gribova, S.A., et al.	Shamanova, I.I. (2)
Grishina, L.A.	Shamurin, V.F.
Ignatenko, I.V.	Shiiatov, S.G.
Ignatenko, I.V., et al. (2)	Sisko, R.K.
IUrtsev, B.A. (2)	Sobolevskaiia, K.A., et al. (2)
Ivanov, V.V. (2)	Sochava, V.B., et al.
Ivanova, E.N., et al.	Staniukovich, K.V.
Ivanova, T.F. (2)	Stenina, T.A.
Karavaeva, N.A., et al.	Storozheva, M.M.
Karol', B.P.	Tikhomirov, B.A. (4)
Katanskaia, V.M. (2)	Tolmachev, A.I.
Khantimer, I.S.	Tonkonogov, V.D.
Khismatullin, Sh.D. (2)	Tsypanova, A.N. (2)
Khrenova, G.S.	Tyrtikov, A.P. (3)
Kolesnikov, B.P.	Urushadze, T.F.
Komin, G.E. (2)	Vasil'evskaia, V.D.
Kosov, B.F., et al.	Vereshchagina, I.V.
Kotelina, N.S.	Zarubin, Z.M., et al.
Kovalev, R.V.	Zhivilko, Z.N.
Kriuchkov, V.V. (2)	Zvereva, O.S.
Krylov, G.V. (2)	
Kukk, E.K.	
Kulai, G.A.	
Kulai, G.A., et al.	
Kuminova, A.V. (2)	
Kuz'min, V.A. (2)	

1971

Akademiia Nauk SSSR
Aleksandrova, V.D.
Al'ter, S.P.
An, P.A.
Andreev, V.N.
Andreev, G.N. (2)
Andreiashkina, N.I.
Andrianov, V.I.
Barashkova, E.A.
Basisty, V.P., et al.
Bedenko, V.P., et al.
Berezin, A.M., et al. (2)
Boch, M.S., et al. (2)
Bogatyrev, L.G., et al.
Buryqin, V.A., et al.
Charushnikova, V.V. (2)
Chashchina, N.I.
Chepurko, N.L. (2)
Chernov, I.U.I.
Chugunova, R.V.
Chukanov, V.I.
Dashkevich, Z.V.
Dedkov, V.S.
Demidenko, V.P.
Dimo, V.N.
Dobrovol'skii, G.V., et al.
Dubovets, A.G.
Egorov, A.D.
Firsova, V.P., et al.
Gabeev, V.N.
Golov, G.V.
Golov, V.I.
Golovkina, G.W. (2)
Gol'tsberg, I.A.
Gritsun, A.T., et al.
Gur'ev, T.A., et al.
Ignatenko, I.V., et al. (2)
Ignatenko, I.V. (2)
Iurtsev, B.A., et al.
Ivanov, G.I.
Ivanova, E.N.
Ivlev, A.M.
Kagan, A.A., et al.
Kalmykov, G.S.
Daravaev, M.N., et al.
Kats, N.IA.
Kazantseva, L.K. (2)
Khantulev, A.A. (2)
Khlonov, I.U.P., et al.
Khlynovskaia, N.I.
Khodachek, E.A.
Khokhriakov, A.P. (2)
Khramov, A.A.
Khrenova, G.S.
Kravtsova, L.M., et al.
Khudiakov, O.I.
Konoiko, M.A.
Kotliarov, I.I.
Kovaleva, S.R.
Krasnoborov, I.M. (2)
Kriuchkov, V.V. (2)
Krylov, G.V.
Kulikova, G.G., et al.
Kuminova, A.V. (4)
Lakyzhenskaia, K.I., et al.
Lamin, L.A.
Lapazina, T.M. (2)
Lapshina, E.I.
Liepa, I.IA
Lokinskaia, M.A.
Lovelius, N.V.
Lukanenkova, V.K.
Makhatadze, L.B., et al.
Malysheva, T.V.
Mammedov, R.G.
Mamytov, A.M., et al.
Manakov, K.N. (2)
Maradudin, I.I.
Matveeva, N.V. (2)
Messick, C.
Mezhennyi, A.A.
Mikhaleva, V.M.
Mishchenko, Z.A.
Nakhutsrishvili, G.Sh.
Naumov, E.M.
Neishtadt, M.I.
Nepomiluev, V.F., et al.
Nifontova, M.G.
Nikitin, E.D. (2)
Nizametdinova, IA.F.
Norin, B.N., et al.
Orlov, A.D.

Panfilov, V.P.
 Parinkina, O.M.
 Pavlova, N.N.
 Pavlova, E.B.
 Petrovskaja-Baranova, T.P.
 Petrovskii, V.V.
 Pustovoitov, N.D.
 Prokhorova, Z.A., et al.
 Priazhnikov, A.N.
 Pospelova, E.B.
 Pospelova, E.B., et al.
 Polozova, T.G.
 Rabotnov, T.A.
 Ramenskaia, M.L.
 Rasskazov, N.M., et al. (2)
 Sergeev, G.M.
 Serova, N.V.
 Shavrov, L.A. (2)
 Shcherbakov, I.P.
 Shikhemirov, M.G.
 Shvetsova, V.M., et al.
 Stepanova, I.V.
 Sumochkina, T.E. (2)
 Sumochkina, T.E., et al.
 Talantsev, N.K.
 Taran, I.V.
 Targul'ian, V.O.
 Tatarchenkov, M.I.
 Tikhomirov, B.A. (2)
 Titov, E.V.
 Tolmachev, A.I. (2)
 Tomilin, B.A.
 Vasil'evskaia, V.D.
 Vereshchagina, I.V.

1972

Alonov, V.A.
 Aleksandrov, V.D., et al.
 Alkseev, R.N.
 Andreev, V.N. (2)
 Andreev, V.N., et al. (2)
 Andreashchik, N.I., et al. (2)
 Arin, E.P.
 Arshonov, I.A.
 Arzhanov, E.M.
 Artamonov, R.V., et al.
 Astashev, V.V., et al.
 Balaurov, N.A.
 Bogachov, I.A.
 Bogdanov, I.G.
 Bogdanov, T.A.
 Bogdanov, I.L.
 Bolotov, I.K.
 Bolotov, V.G., et al.
 Bolotov, V.E.
 Bolotov, I.P.
 Boronko, R.I. (2)
 Boronov, I.U. (2)
 Boronov, V.B.
 Boronov, I.I.U.
 Boronovskaya, S.V. (4)
 Boronov, V.N.
 Boronov, O.V.
 Boronovskaya, I.G.
 Boronov, V.I.
 Boronovskaya, I.I.
 Boronov, I.A., et al.
 Boronov, A.B. (2)
 Boronov, E.N., et al.
 Boronov, N.M.
 Boronov, I.N.
 Boronov, V.P.
 Boronov, O.I.
 Boronov, I.P., et al.
 Boronovskaya, M.A. (2)
 Boronovskaya, S.N.
 Boronovskii, P.L., et al. (2)
 Boronov, K.B.
 Boronov, S.Y.
 Boronov, I.A.
 Boronov, I.A., et al.
 Boronov, I.G.

- Afanas'ev, V.A.
 Aleksandrova, V.D., et al.
 Alekseev, R.N.
 Andreev, V.N. (2)
 Andreev, V.N., et al. (2)
 Andreiashkina, N.I., et al. (2)
 Aparin, B.F.
 Archegova, I.B.
 Aref'eva, Z.M.
 Aristovskaia, R.V., et al.
 Babanin, V.F., et al.
 Belousova, N.A.
 Bogachova, I.A.
 Bogatyrev, L.G.
 Bozhnova, T.A.
 Buks, I.I.
 Bulatova, I.K.
 Bulvchev, V.G., et al.
 Chaika, V.E.
 Chalaia, I.P.
 Chepurko, N.L. (3)
 Chernov, I.U.I. (2)
 D'iaikov, V.N.
 Dolgushin, I.I.U.
 Dorogostaiskaia, E.V. (4)
 Drachkov, V.N.
 Egorov, O.V.
 Elovskaja, L.G.
 Ermolaev, V.I.
 Evdokimova, T.I.
 Fadin, I.A., et al.
 Fedina, A.E. (2)
 Fedorov, K.N., et al.
 Fedorova, N.M.
 Filippova, L.N.
 Firsova, V.P.
 Gavva, O.I.
 Gerasimov, I.P., et al.
 Glazovskaia, M.A. (2)
 Golovkin, B.N.
 Gorchakovskii, P.L., et al. (3)
 Gorodkov, K.B.
 Govorenkov, B.F.
 Grishina, L.A.
 Grishina, L.A., et al.
 Grishina, L.G.
 Gudyna, A.N.
 Gvozdetskii, N.A.
 Ignatenko, I.V. (4)
 Ignatenko, I.V., et al.
 Iurtsev, B.A., et al.
 Ivanov, V.V.
 Ivlev, A.M.
 Kazanskii, V.D.
 Kazantseva, L.K.
 Khantulev, A.A., et al.
 Khmelev, V.A.
 Khokhriakov, A.P. (2)
 Khrenova, G.S.
 Kolesnikov, B.P. (3)
 Kondrat'eva, E.V.
 Kondratova, I.U.I.
 Korobkov, A.A.
 Korotkevich, E.S.
 Kovalev, R.V. (2)
 Kovalev, R.V., et al.
 Krasavtsev, O.A. (2)
 Kriuchkov, V.V. (3)
 Krylov, G.V. (2)
 Kulai, G.A.
 Kurmangaliev, A.B.
 Lamin, L.A.
 Lapazina, T.M.
 Liakhova, I.G.
 Likhanov, B.N.
 Liverovskaia, I.T.
 Lovelius, N.V. (3)
 Lukicheva, A.N. (2)
 Makeev, O.V.
 Makovskii, V.I., et al.
 Makunina, A.A.
 Manakov, K.N.
 Matveeva, N.V.
 Medvedeva, N.S.
 Mezhenyi, A.A.
 Mishukov, N.P.
 Naumov, E.M. (2)
 Neishtadt, M.I.
 Nifontova, M.G. (2)
 Norin, B.N. (2)
 Novichkova-Ivanova, L.N. (2)
 Pachevskii, T.M.

Pak, K.P.
 Parinkina, O.M.
 Parmuzin, I.U.P. (2)
 Permiakova, A.A.
 Petrov, M.G.
 Petrovskii, V.V.
 Piastolova, O.A.
 P'iavchenko, N.I. (2)
 Pitkin, A.I.
 Pospelova, E.B. (3)
 Pridnia, M.V. (2)
 Proskuriakova, T.L., et al.
 Ramenskaia, M.L.
 Roizin, M.B. (2)
 Romanova, E.N.
 Saburov, D.N.
 Salamov, G.A.
 Samoilova, G.S.
 Sannikov, S.M. (2)
 Scherbakov, I.P.
 Segal', A.N.
 Shamurin, V.F., et al. (2)
 Shcherbakova, L.N.
 Shiiatov, S.G.
 Shilova, N.V.
 Shlotgauer, S.D.
 Shuzhmov, A.A.
 Shvarts, S.S.
 Shvarts, S.S., et al.
 Sinel'shchikova, Z.I.
 Smirnov, A.V.
 Smirnov, M.P.
 Smirnov, V.S., et al.
 Snytkin, G.V.
 Sobolev, L.N. (2)
 Sobolevskaia, K.A.
 Sochava, V.B., et al.
 Sokolov, I.A.
 Soldatenkova, Y.P.
 Staniukovich, K.V., et al.
 Stepanova, I.V., et al.
 Sushkina, N.N., et al.
 Tatarkina, A.A.
 Tikhomirov, B.A., et al. (2)
 Tikhomirov, B.A. (2)
 Tikhonova, T.S.
 Tomilin, B.A.
 Tomirdiario, S.V.
 Trotsenko, G.V.
 Tsvetkov, V.F.
 Tyrtikov, A.P.
 Ukhacheva, V.N. (2)
 Urushadze, T.G.
 Urushadze, T.F.
 Uspenskii, S.M.
 Uvarov, L.A.
 Vasil'evskaia, V.D., et al. (5)
 Vasil'evskaia, V.D. (2)
 Vomperskaia, M.I.
 Wielgolaski, F.E. (2)
 Zalenskii, O.V., et al.
 Zhuchkova, V.K.
 Zhuikova, I.V.
 Zhukov, A.M.
 Zubareva, R.S.
 Zvereva, T.S. (3)

- Abrazhko, V.I.
 Agranat, G.A., et al.
 Aliev, D.A.
 Anisimov, V.M. (2)
 Aparin, B.F.
 Avdeev, I.P.
 Belorusov, D.V.
 Belov, A.V.
 Berezina, N.A., et al.
 Berman, D.I.
 Beskin, I.A.
 Blagodatskikh, L.S.
 Blintsov, I.K.
 Blintsov, I.K., et al.
 Boch, M.S., et al.
 Bogatyrev, L.G., et al.
 Borzhonov, B.B.
 Bratsev, A.P., et al.
 Bulgakov, V.A., et al.
 Chernov, I.U.I. (3)
 Danilov, I.D.
 Dashkevich, Z.V.
 D'iakonova, A.A.
 D'iakov, V.N.
 Dimo, V.N.
 Dmitrieva, E.V. (2)
 Dorogostaiskaia, E.V., et al.
 Ershov, E.D., et al.
 Fedorovskii, V.D.
 Fedotov, S.S.
 Forminykh, L.A.
 Garmonov, I.V.
 Gavril'ev, P.P., et al.
 Gavrilova, M.K.
 Gerasimenko, T.V.
 Gerasimenko, T.V., et al.
 Ghilarov, M.S.
 Golovkin, N.B. (2)
 Gorchakovskii, P.L., et al.
 Gorozhankina, S.M. Gran
 Granik, G.I., et al.
 Gusev, I.I., et al.
 Gvozdetskii, N.A.
 Iakushevskaia, I.V., et al.
 Ignatenko, I.V. (2)
 Ignatenko, I.V., et al.
 Ignat'eva, L.A. (2)
 Iurtsev, B.A. (3)
 Iurtsev, B.A., et al.
 Ivashchenko, A.A.
 Ivlev, A.M., et al. (2)
 Kalinin, A.M.
 Kamenetskaia, I.V.
 Kamenetskaia, I.V., et al.
 Kapranov, V.E., et al.
 Karagodina, E.M.
 Karavaeva, N.A. (2)
 Kazakov, K.IA. (2)
 Khantulev, A.A.
 Khlonov, I.U.P. (2)
 Khodachek, E.A.
 Khokhriakov, A.P. (3)
 Khrustalev, L.N., et al. (2)
 Khutortsev, I.I.
 Kinosita, S.
 Kishchinskii, A.A., et al.
 Kmitovenko, A.T., et al. (2)
 Komin, G.E.
 Kondrat'eva, K.A., et al.
 Konovalov, A.A., et al.
 Konstantinova, G.S.
 Kosov, B.F.
 Kostiaev, A.G.
 Kotliarov, I.I.
 Kovalev, R.V.
 Kozhevnikov, I.U.P. (2)
 Kozlovskaja, L.S.
 Kriuchkov, V.V. (6)
 Kriuchkov, V.V., et al.
 Kruchinin, I.U.A.
 Ksenofontov, V.
 Kudriavtsev, V.A. (2)
 Kulai, G.A.
 Kuminova, A.V.
 Kudriavtsev, V.A., et al.
 Kuz'min, V.A.
 Kuznetsov, I.U.V.
 Lapina, N.N.
 Lapshina, E.I.

Leshchikov, F.N., et al.
 Logutenko, N.V., et al. (2)
 Lukashev, G.N. (2)
 Makeev, V.M.
 Makeev, O.V.
 Makhatadze, L.B.
 Maksimova, L.M., et al.
 Malinowsky, K.A.
 Malyshev, A.A.
 Malysheva, T.V.
 Mandarov, A.A., et al.
 Martynenko, V.A.
 Matveeva, N.V., et al. (3)
 Medvedev, L.V., et al.
 Mel'nikov, P.I., et al.
 Mel'nikov, P.I.
 Mikhailov, I.S.
 Miskina, L.V.
 Naumov, E.M.
 Nechaeva, E.G.
 Nishchakov, A.F.
 Nepromilueva, N.E.
 Novikov, F.IA.
 Openlender, I.V.
 Orlov, V.I.
 Ovchinnikov, S.M.
 Panov, L.K.
 Parinkina, O.M. (3)
 Parmuzin, IU.P.
 Pavlov, A.V. (2)
 Pen'kovskaia, E.F. (3)
 Petrov, E.S., et al.
 P'iauchenko, N.I., et al.
 Pivovarova, Zh.F., et al.
 Popov, O.S. (2)
 Popov, A.I.
 Pospelova, E.B., et al.
 Pozdnyakov, L.K.
 Prozorov, IU.S.
 Prozorova, M.I.
 Rogacheva, E.V.
 Roichenko, G.L.
 Romanova, E.N., et al.
 Sabo, E.D., et al.
 Sakai, A.
 Salatova, N.G.
 Savchenko, I.F.
 Semenov, I.V., et al. (2)
 Semikhatova, O.A., et al.
 Shamurin, V.F.
 Shchelkunova, R.P.
 Shishkina, L.P.
 Shliakov, R.N.
 Shoba, S.A., et al.
 Shvetsov, P.F., et al.
 Shvetsov, P.F.
 Sinel'shchikova, Z.I.
 Sisko, R.K.
 Skabichevskii, A.P.
 Stenina, T.A.
 Stepanova, I.V.
 Steshenko, A.P.
 Strelkov, S.A., et al.
 Sysuev, V.V.
 Talantsev, N.K.
 Taran, I.V. (2)
 Tikhmenev, E.A., et al.
 Tikhmenev, E.A.
 Tikhomirov, B.A.
 Titov, E.V.
 Tolmachev, A.P., et al.
 Trotsenko, G.V.
 Trush, N.I., et al.
 Tsydypov, D.Ch.
 Tyrtikov, A.P. (3)
 Ukhacheva, V.N.
 Urushadze, T.F.
 Uspensky, S.M.
 Uvarkin, IU.T.
 Vainshtein, E.A.
 Vakurov, A.D. (2)
 Vasil'ev, P.V., et al.
 Vasilevich, V.I., et al.
 Vasil'evskaia, V.D., et al.
 Vasil'evskaia, V.D.
 Voroshilov, G.D.
 Votiakov, I.N.
 Wielgolaski, F.E.
 Zaboeva, I.V.
 Zaboeva, I.V., et al.
 Zaikova, V.A.
 Zakharov, IU.T.
 Zharkova, Yu.G.
 Zhukov, A.M.
 Zhukova, A.L. (2)
 Zubareva, R.S.
 Zubets, V.M., et al.
 Zvorykina, K.V.

- Afanas'eva, T.V., et al.
 Afonina, O.M.
 Aleksandrova, V.D.
 Alekseeva, R.M.
 Andreev, V.N.
 Andreiashkina, N.I. (3)
 Anisimova, K.A.
 Archegova, I.B. (2)
 Aref'eva, Z.N.
 Belousova, N.A.
 Bobov, N.G.
 Boch, M.S.
 Bogatyrev, L.G. (2)
 Bogushevskii, A.A. (2)
 Broido, A.G.
 Bulatova, I.K.
 Buzunova, I.O.
 Chertovskoi, V.G.
 D'iakov, V.N.
 Dorofeeva, N.A.
 Dylis, N.V.
 Dzhuraev, A.D.
 Elovskaiia, L.G. (2)
 Fedorova, N.M.
 Firsova, V.P.
 Galkina, N.V.
 Gar, K.A.
 Gasheva, A.F.
 Gerasimenko, T.V., et al.
 Gerasimov, I.P.
 Gorchakovskii, P.L. (2)
 Gradusov, B.P.
 Granina, G.T.
 Ignat'eva, L.A. (2)
 Iurtsev, B.A.
 G'rishina, L.A.
 Iakovlev, A.S.
 Ignatenko, I.V.
 Ivanov, B.I.
 Ivanova, E.N.
 Izmailova, N.N.
 Karavaeva, N.A. (2)
 Katenin, A.E.
 Kazantseva, L.K.
 Khaïlov, S.Kh.
 Khantimer, I.S. (2)
 Khokhriakov, A.P.
 Khranova, N.F.
 Konorovskii, A.K.
 Konstantinova, G.S., et al.
 Koposov, G.F. (2)
 Kornienko, V.A.
 Kosmachev, K.P.
 Kotelina, N.S.
 Kovaleva, S.R.
 Kovda, V.A. (2)
 Kozhevnikov, I.U.P. (3)
 Kozlovskaiia, L.S.
 Kriuchkov, V.V.
 Kulai, G.A.
 Lashchinskii, N.N. (2)
 Listov, A.A.
 Makkaveev, N.I.
 Malysheva, G.S.
 Mamytov, A.M.
 Nakhutsrishvili, G.Sh.
 Naumov, E.M. (2)
 Netrobov, V.P.
 Norin, B.N.
 Nukhimovskaiia, UY.D.
 Orlov, E.D.
 Orlov, A.IA.
 Pak, V.A.
 P'iaevchenko, N.I. (2)
 Pospelova, E.B.
 Prozorov, I.U.S.
 Rakhmanina, A.T.
 Rusanova, G.V.
 Sakai, A.
 Savvinov, D.D.
 Shamurin, V.F.
 Shikhemirov, M.G.
 Shvedchikov, G.V.
 Shvirst, A.A.
 Simkin, G.N.
 Smirnov, V.V.
 Sokolov, I.A. (2)
 Sukhov, V.A.
 Surovikina, V.I.
 Targul'ian, V.O.
 Tikhomirov, B.A.
 Tolmachev, A.I., et al.
 Trotsenko, G.V. (2)
 Turmanina, V.I.
 Tyrtikov, A.P.
 Urusevskaiia, I.S.

1974

Vasil'ev, N.G.
Vasil'evskaia, V.D. (2)
Vodop'ianova, N.S.
Zaboeva, I.V.
Samolotchikova, S.A.
Zvereva, T.S.

1975

Alifanov, V.M.
Andreev, V.N.
Bogatyrev, L.G.
Bogushevskii, A.A.
Botman, K.S.
Buks, I.I.
Chernov, IU.I.
Firsova, V.P.
Gorchakovskii, P.L. (2)
Gorova, A.K.
Gorozhankina, S.M.
IURTsev, B.A. (3)
Katrish, V.N.
Khlebodarov, V.N.
Kolesnikov, B.P.
Konstantinova, G.S.
Korovin, A.I.
Korzun, M.A.
Kovalev, R.V.
Krasnoshchekov, IU.N.
Kriuchkov, V.V. (2)
Kuz'min, V.A. (2)
Lashchinskii, N.N.
Mamytov, A.M.
Matveeva, N.V.
Mel'nikov, P.I.
Moskalenko, N.G.
Nesmelova, E.I.
Nikitin, E.D. (2)
Norin, B.N.
Panasenkov, I.N.
Perfil'eva, V.I.
Petrovskii, V.V.
Rubtsov, N.I.
Rusanova, G.V.
Savich, M.A.
Scherbakov, I.P.

1975

Shikhemirov, M.G. (2)
Siplivinskii, V.N.
Tomilin, B.A.
Tomirdiario, S.V.
Tonkonogov, V.D.
Trofimov, N.N.
Vakurov, A.D.
Vasil'evskaia, V.D.
Vstovskaia, T.N.
Zvereva, T.S.

1976

Budaeva, S.E.
Chernov, IU.I.
D'iachenko, A.P.
El'chaninov, E.A.
Galaktionov, B.V.
Gol'dtman, V.G.
Grigor'ev, N.F.
Kaganovskaia, S.E.
Kriuchkov, V.V.
Krylov, V.F.
Kulagin, IU.Z.
Liverovskaia, I.T.
Mart'ianova, G.N.
Mihailov, N.A.
Mikhailovskii, V.V.
Moskalenko, N.G. (2)
Popov, B.I.
Sever'ianov, A.N.
Smirnov, V.V.
Sukhodol'skii, S.E.
Tikhmenev, E.A.
Tomirdiario, S.V.
Tyrtikov, A.P.
Vital', A.D.
Zhigarev, L.A.

APPENDIX II: ALPHABETICAL LISTING OF
CITATIONS (1970-1976)

<p>1975</p> <p>(1) Kuznetsov, M.G. Kuznetsov, V.N. Kuznetsov, S.A. Kuznetsov, S.V. Kuznetsov, V.D. Kuznetsov, N.N. Kuznetsov, A.D. Kuznetsov, V.D. Kuznetsov, T.N. Kuznetsov, T.S.</p> <p>1976</p> <p>Kuznetsov, S.V. Kuznetsov, M.I. Kuznetsov, A.P. Kuznetsov, V.A. Kuznetsov, S.V. Kuznetsov, V.G. Kuznetsov, N.N. Kuznetsov, N.R. Kuznetsov, V.V. Kuznetsov, V.F. Kuznetsov, I.I. Kuznetsov, I.I. Kuznetsov, S.S. Kuznetsov, S.A. Kuznetsov, V.V. Kuznetsov, N.G. (2) Kuznetsov, S.I. Kuznetsov, A.K. Kuznetsov, V.V. Kuznetsov, S.A. Kuznetsov, S.V. Kuznetsov, A.P. Kuznetsov, A.P. Kuznetsov, A.D. Kuznetsov, I.A.</p>	<p>1977</p> <p>Kuznetsov, S.V. Kuznetsov, M.I. Kuznetsov, A.P. Kuznetsov, V.A. Kuznetsov, S.V. Kuznetsov, V.G. Kuznetsov, N.N. Kuznetsov, N.R. Kuznetsov, V.V. Kuznetsov, V.F. Kuznetsov, I.I. Kuznetsov, I.I. Kuznetsov, S.S. Kuznetsov, S.A. Kuznetsov, V.V. Kuznetsov, N.G. (2) Kuznetsov, S.I. Kuznetsov, A.K. Kuznetsov, V.V. Kuznetsov, S.A. Kuznetsov, S.V. Kuznetsov, A.P. Kuznetsov, A.P. Kuznetsov, A.D. Kuznetsov, I.A.</p>
---	--

Abrazhko, V.I., 1973:

Physiological aspects of competition of soil moisture between grown trees and underbrush in the southern taiga biogeocenoses. In *Probl Biogeotsenologii Geobot Bot Geogr*, p. 25-38. In Russian.

NAL/CAIN*

Abstracts of the sixth all-union conference on the study and development of alpine flora and vegetation, 1974:

(Tezisy dokladov) Vsesoiuznoe soveshchanie po voprosam izucheniia i osvoeniia flory i rastitel'nosti vysokogorii, 6th, Stavropol' 1974. Stavropol', 320 p. In Russian.

30-3547†

Afnas'ev, V.A., 1972:

Evaluating the influence of water permeability of soils on forest growth in the Kamchatka River basin (Otsenka vliianiia vodoprantsaemosti pochv na rasprostranenie lesnykh formatsii v basseine reki Kamchatki) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 105-109. In Russian with English summary.

30-688

Afnas'eva, T.V. et al., 1974:

Relict features of secondary podzolic soils in southern taiga of West Siberia (O reliktovykh priznakakh vtorichno-podzolistykh pochv iuzhnoi taigi Zapadnoi Sibiri). Moscow, Universitet. Vestnik. Seriya 6, Biologiya i pochvovedenie, Jan.-Feb. 1974, No. 1, p. 118-124. In Russian with English summary. 18 refs. Remezova, G.L.

Taiga soils
Taiga vegetation
Soil formation

28-4308

Afonina, O.M., 1974:

Characteristics of some briofloras of Chukchi Peninsula (Kharakteristika nekotorykh konkretnykh bioflor chukotskogo poluostrova). Botanicheskii zhurnal, Feb. 1974, 59(2), p. 192-205. In Russian with English summary. 15 refs.

Plant ecology
Mosses
Arctic vegetation
USSR--Chukchi Peninsula

28-4225

* Source (see text).

† CRREL Bibliography number (volume 30, item 3547).

Agranat, G.A. et al., 1973:

Studies, preservation and utilization of natural environments in northern regions abroad (Izuchenie, okhrana i ispol'zovanie prirodnoi sredy na Zarubezhnom Severe). Problemy severa, 1973, Vol. 18, p. 196-212. In Russian. 30 refs. Andreeva, F.N.

Subarctic soils
Forest tundra
Subarctic vegetation

28-3759

Agrochemical characteristics of soils in the USSR. Far East (Agrokhimicheskaya kharakteristika pochv SSSR. Dal'nii Vostok). Akademiia nauk SSSR. Pochvennyi institut, Moscos, Nauka, 1971, 331 p. In Russian. Numerous references. No microfiche available. S599.R9A72

Active layer
Arctic soils
Tundra soils

Akad. Nauk SSSR, 1971

Biogeocoenoses of the tundra. International Tundra Biome translation March 1971 No. 1. 4 p. Translated from Vystavka Dostizhenii Narodnogo Khozyaistva SSSR, Akad. Nauk SSSR, 1970. 9 refs.

Tundra vegetation

BROWN

-- 1970:

Akademiia nauk SSSR.

Biological basis for the Utilization of natural resources in the north (Biologicheskie osnovy ispol'zovaniia prirody Severa) Akademiia nauk SSSR. Komi filial. Institut biologii Syktyvkar, Komi knizhnoe izd-vo, 1970 - 287p. In Russian. Numerous references.

Tundra.
Forest tundra.

26-1690

Aleksandrova, V.D., 1971:

Analysis of vegetative cover at the boundary of spot-medallion and hummocky tundra in west Taymyr (Opyt analiza struktury rastitel'nogo pokrova na granitse fitotsenozov platnistoi i bugorkovoi tundry v Zapadnom Taymyre) Biogeotsenozy Taymyrskoi tundry i ikh produktivnost' (Biogeocoenoses of Taymyr tundra and their productivity) Leningrad, Nauka, p. 185-197. In Russian with English summary. Refs.

27-1551

Aleksandrova, N.M. et al. 1970:

Basic regularities governing acclimatization of trees and brushwood in the polar-alpine botanical garden (osnovnye zakonomernosti introduktsii derev'ev i kustarnikov v poliarno-al' piiskom botanicheskom sadu) Moscow. Glavnyi botanicheskii sad. Biulleten' 1970 Vol. 77 p. 3-7. In Russian. 6 refs. Golovkin, B.N.

Alpine soils.
Alpine vegetation.
Acclimatization.

26-434

Aleksandrova, V.D. et al., 1972:

Determining phytomass structure and its reserves in tundra plant communities (Metodika opredeleniia zapasov i struktury fitomassy tundrovyykh soobshchestv). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 60-64. In Russian. 12 refs. Shamurin, V.F.

Tundra vegetation.
Biomass.

28-1256

Aleksandrova, V.D., 1970:

Overground and underground part of plant mass in plant communities of various subzones in the arctic (Nadzemnaia i podzemnaia massa rastenii v soobshchestvakh raznykh podzon Arktiki) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 13-19. In Russian. 16 refs.

Aleksandrova, V.D., 1970:

Deserts.
Arctic vegetation.
Ecology.

26-1692

Aleksandrova, V.D., 1974:

Special methods of succession analysis in Eurasian tundra vegetation. Handb Veg Sci, 8: 61-64. In English.

NAL/CAIN

Aleksandrova, V.D., 1970:

Vegetation of the tundra zones in the USSR and data about its productivity. International Union for the Conservation of Nature and Natural Resources. IUCN publications, new series. 1970 No. 16. Productivity and conservation in northern circumpolar lands. Proceedings of a symposium held in Edmonton, Alberta, October 15-17, 1969, p. 93-114. Bibliography p. 110-114.

Tundra vegetation.
Vegetation patterns.
Plant productivity.

27-570

Alekseev, R.N., 1972:

Eutrophic swamps of the central Pechora River Basin (Evtrofnye bolota srednei Pechory). Geograficheskoe obshchestvo SSSR. Komi filial. Izvestiia, 1972, 2(4), p. 51-57. In Russian. 5 refs.

Peat.
Plant ecology.

28-412

Alekseeva, R.M., 1974:

Mires of the ecotone between the zones of aapa fens and palsa bogs in the northeastern European part of the USSR (Bolota perekhodnoi polosy mezhdru zonami aapa-i bugristykh bolot na severo-vostoke evropeiskoi chasti SSSR). Botanicheskii zhurnal, Jan. 1974, 59(1), p. 74-81. In Russian. 17 refs.

Mosses
Taiga vegetation
Peat

Aliev, D.A., 1973:

Data on the vegetation of the Lachin region of Azerbaijan-SSR. Izv Akad Nauk Az SSR Ser Biol Nauk (3): 3-9. In Russian? Gadzhiev, V.D.; Vagabov, Z.V.; Shikhemirov, M.G.

Biol. Abst. Inc.

Alifanov, V.M., 1975:

Composition of organic matter in some soils of the eastern Transbaikal (Sostav organicheskogo veshchestva nekotorykh pochv Vostochnogo Zabaikal'ia) Vsesoiuznaia konferentsiia Pochvennyi kriegerez i melioratsiia merzlotnykh i kholodnykh pochv. Pushchino, Oct., 1975, Materially. Moscow, Nauka, p. 109-114. In Russian. 7 refs. Zolotareva, B.N.

30-4238

Al'ter, S. P., 1971:

Landscape method of geomorphological interpretation of aerial photographs, taking as an example the area of the lower course of the Irtysh River (Landshartnyi metod geomorfologicheskogo deshifirovaniia aerofotosnimkov na primere Nizhnego Priirtysh'ia). Sibirskii geograficheskii sbornik, 1971, Vol. 7, p. 143-198. In Russian. 100 refs.

Geobotanical interpretation

Vegetation

Taiga terrain

28-3025

An, P. A., 1971:

Applicability of the photometric method of determining yield of the mass of mountain vegetation. O primenimosti fotometricheskogo metoda opredeleniia urozhaiia rastitel'noi massy v gornyykh usloviakh. Tashkend. Sredneaziatskii nauchno-issledovatel'skii gidrometeorologicheskii institut. Trudy 1971 55(70). p. 69-74. In Russian. 9 refs. QC851.T28.

Alpine vegetation.

Biomass.

27-2631

Anatomical structure of leaves of some Arctic sedges
Anatomicheskoe stroenie lista nekotorykh arkticheskikh osok. Botanicheskii zhurnal, March, 1972, 57(3) p. 373-381. In Russian. 14 refs.

Arctic soils.

Arctic vegetation.

Plant ecology.

27-20

Andreev, G.N., 1970:

Regularities governing the success of plant introduction in the Far North (K voprosu o zakonmernostiakh pereseleniia rastenii na Krainii Sever) Akademiia nauk SSSR. Komi filial. Insitut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 81-85. In Russian. 19 refs.

Arctic vegetation.

Plants (Botany).

Arctic soils.

26-1703

Andreev, V.N. et al., 1972:

Determining seasonal variations in surface Phytomass of herbaceous plants. Metodika opredeleniia sezonnykh izmenenii zapasa nadzemnoi fitomassy u travianistykh rastenii. Botanicheskii zhurnal Oct. 1972 57(10). p. 1265-1279. In Russian. Galaktionova, T.F. Zakharova, V.I. Neustroeva, A.I.

Tundra soils.

Tundra vegetation

Biomass.

USSR-Kolyma River.

27-2347

Andreev, V.N., 1970:

Geographic regularities governing the distribution of surface phytomass in the tundra zone, in relation to the movement of tree and shrub vegetation to the north (Nekotorye geograficheskie zakonmernosti v raspredelenii nadzemnoi fitomassy v tundrovoi zone v sviazi s prodvizheniem na sever drevesno-kustarnikovoii rastitel'nosti) Akademiia nauk SSSR. Komi filial. Institut biologii; Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utili-

2

Andreev, V.N., 1970:

zation of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 6-13. In Russian. 22 refs.

Arctic vegetation.

Tundra vegetation.

Forest tundra.

26-1691

Andreev, V.N., 1972:

Influence of human activities on tundra vegetation in relation to general trend of tundra biome development (Izuchenie antropogennykh vozd istvii na rastitel'nost' tundry v sviazi s obshchim napravleniem razvitiia tundrovogo bioma) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 173-179. In Russian with English summary. Refs. 30-694

Andreev, V.N., 1971:

Methods of estimating and mapping forage reserves in phytomass of Subarctic regions (Metodika ucheta i kartirovaniia kormovykh zapasov fitomassy Subarktiki). Rastitel'nye resursy, 1971, 7(3), p. 439-444. In Russian. 8 refs.

Subarctic vegetation

Tundra vegetation

Forest tundra

26-3019

Andreev, V.N. et al., 1972:

Methods of estimation of seasonal changes in above-ground phytomass of herbs. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 102-110. Galaktionova, T.F. Zakharova, V.I. Neustroeva, A.I.

Tundra vegetation.

Plants (Botany).

27-2662

Andreev, V.N., 1974:

Pasture management in connection with reindeer raising. In *Pastbishcha i senokosy SSSR*. A.P. Movsisiants, comp., p. 461-471. In Russian.

NAL/CAIN

Andreev, V.N., 1975:

Seasonal dynamics of some plants in subarctic tundra (Sezonnaia dinamika nadzemnoi fitomassy nekotorykh rastenii subarkticheskoi tundry) *Botanicheskie issledovaniia v Iakutii Yakursk, Iakutskii filial SO AN SSR*, p. 72-78. In Russian. 2 refs. Galaktionova, T.F.; Meustroeva, A.I.

30-3276

Andreev, V.N., 1972:

Studying the effect of human activities on Arctic and Subarctic vegetation (Izuchenie antropogennykh vozdeistvii na rastitel'nost' Arktiki i Subarktiki). *Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses)* Leningrad, Nauka, 1972, p. 43-49. In Russian. 9 refs.

Arctic vegetation.
Arctic soils.
Tundra vegetation.

28-1252

Andreev, G.N., 1971:

Transplantation of some plants growing in the northeastern USSR to Kola Peninsula. *Pereselenie rastenii Severo-Vostoka SSSR na Kol'skii poluostrov. Vvedenie v kul'turu novykh vidov poleznykh rastenii v usloviakh Krainego Severa*. (Introduction of new types of useful plants in the Far North). Leningrad, Nauka, 1971 p. 82-98. In Russian. 17 refs.

Taiga soils.
Taiga vegetation.

Andreev, G.N., 1971:

Forest tundra.
USSR-Kola Peninsula.

27-2585

Andreiashkina, N.I., 1974.

Accumulation and decomposition of vegetational remains in forest tundra east of the Urals (Kazlozhenie i nakoplenie rastitel'nykh ostatkov v lesotundre Zaural'ia) *Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1974 Vol. 88 p. 129-134*. In Russian. 24 refs.

30-453

Andreiashkina, N.I. et al., 1972:

Estimating the productivity of some shrub, dwarf shrub and herbaceous communities in forest tundra. *Produktivnost' kustarnikovykh, kustarnichkovykh i travianykh soobshchestv lesotundry i metodika ee otsenki. Edologiya. 1972 No. 3*. p. 5-12. In Russian. 13 refs. Gorchakovskii, P.L.

Tundra vegetation.
Forest tundra.
Plant ecology.

27-1695

Andreiashkina, N.I., 1974:

Leaf shedding in *vaccinium vitis-idaea* and *Ledum palustre* var. *decumbens* in subarctic forest tundra (Zaural'ia) *Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1974 Vol. 88. p. 124-128*. In Russian.

30-452

Andreiashkina, N.I., 1971:

Procedure for determining the overground part of phytomass of shrubs and dwarf shrubs in forest tundra (K metodike opredeleniia nadzemnoi massy kustarnikov i kustarnichkov lesotundry) *Ekologiya 1971 No. 2 p. 82-84*. In Russian. 4 refs.

Forest tundra.
Tundra vegetation.
Ecology.

26-1054

Andreiashkina, N.I. et al., 1972:

Productivity, and methods of its assessment, of shrub, dwarf-shrub, and herbaceous communities of the forest tundra. *Soviet journal of ecology*, May-June 1972 (Publ. March 1973) 3(3), p. 195-202. Translated from *Ekologiya*. For Russian original see 27-1695. 13 refs. Gorchakovskii, P.L.

Tundra vegetation.
Forest tundra.
Plant ecology.

28-348

Andreiashkina, N.I., 1974:

Relationship between the weight of green and fallen leaves in some hypoarctic bushes and shrubs (O sootnoshenii vesa zelenykh i opavshikh list'ev pri opredelenii opada u nekotorykh gipoarkticheskikh kustarnikov i kustarnichkov) *Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1974 Vol. 88 p. 121-123*. In Russian. 3 refs.

30-451

Andrianov, V.I., 1971:

Protective vegetation grows even in tundra (I v tundre rastet zhivaia zashchita) Put' i putevoe khoziaistvo 1971 No. 8 p. 27-28. In Russian.

Tundra vegetation.

26-1455

Anisimov, V. M., 1973:

Filtration properties of peats in the central Amur River plain (O fil'tratsionnykh svoistvakh torfov Sredneamurskoi nizmennosti). Prirodnye osobennosti bolot Priamur'ia (Natural characteristics of swamps in the Amur River area). Novosibirsk, Nauka, 1973, p. 89-96. In Russian. 12 refs.

Peat

28-3485

Anisimov, V.M., 1973:

Thermal regime of swamp soils in the central Amur River plain (Teplovoi rezhim bolotnykh pochv Sredneamurskoi nizmennosti). Prirodnye osobennosti bolot Priamur'ia (Natural characteristics of swamps in the Amur River area). Novosibirsk, Nauka, 1973, p. 123-131. In Russian. 9 refs.

Active layer
Soil temperature

28-3489

Anisimova, K.A., 1974:

Perennial grasses in southwest Yakutia (Mnogoletnie travy na iugo-zapada Iakutii) Biologicheskie problemy Severa, VI simpozium, Vypusk 4 (Biological problems of the north, 6th symposium, Vol. 4) Yakutsk, Akademiia nauk SSSR, p. 109-113. In Russian. Lipangin, G.I.

29-3670

Aparin, B. F., 1972:

Investigating Taiga soils with two bleached zones in the northeastern part of the RSFSR. Nekotorye rezul'taty issledovaniia pochv s dvumia osvetlennymi gorizontami v taezhnoi polose severo-zapada RSFSR. Leningrad. Universitet. Vestnik. Geologiya-geografiia. Sept. 1972 18(3). p. 99-107. In Russian with English summary. 7 refs.

Taiga soils.
Soil formation.
Podsol.

27-1720

Aparin, B.F., 1973:

Mineralogical characteristics of the silt fraction of podsoils developing on binary rocks of central taiga in the European RSFSR (Mineralogicheskaiia kharakteristika ilistoi fraktsii podzolistykh pochv na dvuchlennykh porodakh srednei taigi evropeiskoi chasti RSFSR). Leningrad. Universitet. Vestnik. Geologiya-geografiia. March 1973, 6(1), p. 70-77. In Russian with English summary. 10 refs.

Taiga soils.
Soil formation.
Soil profiles.

28-417

Archegova, I.B., 1974:

Humus profiles of some taiga and tundra soils in the European USSR. Sov. Soil Sci, 6(2): 136-141. In English. Translated from Pochvovedenie 6(3): 23-28.

NAL/CAIN

Archegova, I.B., 1974:

Humus profiles of some taiga and tundra soils of the European USSR. Pochvovedenie, 3: 23-28. In Russian. English summary.

NAL/CAIN

Archegova, I.B., 1972:

Humus zone in the clayey loam tundra soils in the northeast European tundra. Kharakter gumusirovannogo gorizonta v suglinistykh tundrovnykh pochvakh na severovostoke Evropeiskoi tundry. Ekologiya. 1972 No. 5. p. 64-67. In Russian. 8 refs.

Tundra soils.
Soil composition.
Tundra vegetation.

27-2352

Archegova, I.B., 1970:

Organic matter composition in the soils of the southern subzone of the European tundra (Vorkuta). (Sostav organicheskogo veshchestva v pochvakh iuzhnoi podzony Evropeiskoi tundry (Vorkuta) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 135-141. In Russian. 3 refs.

Archegova, I.B., 1970:
Tundra soils.
Tundra vegetation.
USSR-Vorkuta.

26-1713

Aref'eva, Z.N., 1974:

Characteristics of the nitrogen regime of soils under spruce forests in the southern taiga of the Transurals. Lesovedenie 1: 3-12. In Russian. Kolesnikov, B.P.

NAL/CAIN

(Lockheed)

Aref'eva, Z.M., 1972:

Soil-forming rocks and soil of the Tavda and Kuma interfluvial valleys (Pochvoobrazuiushchie porody i pochvy doliny r. Tavdy i Tavda-Kuminskogo mezhdurech'ia). Akademiia nauk SSSR. Ural'skii nauchnyi tsentr. Institut ekologii rastenii i zhivotnykh. Trudy, 1972, Vol. 83, p. 27-65. In Russian. 36 refs.

Soil formation
Taiga vegetation
Soil composition
USSR-Tavda

28-2665

Aristovskaia, R.V. et al., 1972:

Preliminary results of the IBP studies of soil microbiology in tundra. International Biological Programme, Tundra biome: Proceedings IV. International Meeting on the Biological Productivity of Tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, Tundra Biome Steering Committee, April 1972. p. 80-92. 13 refs. Parinkina, O.M.

Tundra soils.

27-2659

Avdeev, I.P., 1973:

Cooperation between industries and agricultural enterprises under northern conditions (Osobennosti kooperirovaniia promyshlennosti i sel'skogo khoziaistva v usloviakh Severa). Problemy severa, 1973, Vol. 18, p. 154-158.

Arctic soils
Arctic vegetation

28-3753

Babanin, V.F. et al., 1972:

Magnetic susceptibility of Cryogenic Taiga soils of the Magadan region. Magnitnaia vospriimchivost' merzlotno-taezhnykh pochv Magadanskoii oblasti. Moscow. Universitet. Vestnik. Seriya 6. Biologiya i pochvovedenie. Sept.-Oct. 1972. No. 5. p. 88-92. In Russian with English summary. 5 refs. Khudiakov, O.I.

Taiga soils.
Taiga vegetation.

27-2346

Barashkova, E.A., 1971:

Photosynthesis in Fruticose Lichens Cladonia Alpestris (L.) Rbh. and C. Rangiferina (L.) Web. in the Taimyr Peninsula. International Tundra Biome Translation Dec. 1971 No. 4. 7 p. Translated from? 19 refs.

Lichens
Tundra vegetation

BROWN

Basistyi, V.P. et al., 1971:

Agrochemical characteristics of soils in the Khabarovsk region and the effectiveness of fertilizers (Agrokhimicheskaia kharakteristika pochv Khabarovskogo kraia i effektivnost' udobrenii). Agrokhimicheskaia kharakteristika pochv SSSR. Dal'nii Vostok. Moscow, Nauka, 1971, p. 70-107. In Russian. 23 refs. Basistyi, A.P.

Soil formation
Forest soils
Meadow soils
USSR--Khabarovsk

26-3818

Bedenko, V.P. et al., 1971:

Ecologic and physiological characteristics of certain mountain plants (K ekologo-fiziologicheskoi kharakteristike nekotorykh gornykh rastenii) Botanicheski zhurnal. May 1971. 56(5) p. 711-722. In Russian. 37 refs. Belosluedova, L.F.; Kiseleva, L.I.; Shokova, R.I.

Alpine soils.
Alpine vegetation.
Ecology.

26-462

Belorusev, D.V., 1973:

Development of means of production in new settlements in the north and the problems of natural environment preservation (Razvitie proizvoditel'nykh sil v severnykh raionakh novogo osvoeniia i problemy zashchity prirodnoi sredy). Problemy severa, 1973, Vol. 18, p. 141-146. In Russian.

Arctic soils
Arctic vegetation

28-3751

Belousova, N.A., 1972:

Data on the ecology of swamp plants. Nekotorye dannye po ekologii bolotnykh rastenii. Ekologiya, 1972 No. 4. p. 90-93. In Russian. 5 refs.

Vegetation.
Plant ecology.

27-1696

Belousova, N.A., 1974:

Stratigraphy of peat deposits in swamps of the southern part of Onega-white Sea water divide (Stratigrafiia torfianykh zalezhei bolot iuzhnoi chasti Onezhsko-Belomorskogo vodorazdela) Biologicheskie problemy Severa, VI simpozium; Vypusk 6: Pochvovedenie i zemel'nye resursy (Tezisy dokladov) (Biological Problems of the North, 6th symposium; Vol. 6: Soil science and earth resources (Summaries of the papers) Yakutsk, Akademiia nauk SSSR, p. 129-134. In Russian.

29-1073

Belov, A.V., 1973:

Vegetation map of the southern part of east Siberia: principles and methods of its compilation (Karta rastitel'nosti iuga Vostochnoi Sibiri, printsipy i metody sostavleniia). Geobotanicheskoi kartografirovanie (Geobotanical mapping). Leningrad, Nauka, 1973, p. 16-30. In Russian. 19 refs.

Vegetation
Plant ecology
USSR--East Siberia

28-3528

Berezin, A.M. et al., 1971:

Relation between forest vegetation, topography and lithology in the central podkamennaia Tunguska Basin (O sviazi lesnoi rastitel'nosti s rel'efom i gornymi porodami v basseine srednego techeniia r. Podkamennoi Tunguski) Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Izvestiia vysshikh uchebnykh zavedenii. Lesnoi zhurnal 1971 No. 3 p. 21-24. In Russian. 3 refs. Grigor'ev, A.A.

2

Berezin, A.M. et al., 1971:

Subarctic soils.
Subarctic vegetation.

26-1464

Berezina, N.A. et al., 1973:

Swamp formation processes in the central and southern taiga of West Siberia (O protsesse bolotoobrazovaniia v taizhnoi zone (podzonakh srednei i iuzhnoi taigi) Zapadnoi Sibiri). Prirodnye uslovia Zapadnoi Sibiri, 1973, Vol. 3, p. 91-106. In Russian. 29 refs. Kulikova, G.G., Liss, O.L., Tiuremnov, S.N.

Taiga terrain.
Taiga vegetation.
Thermokarst.

28-268

Berman, D.I., 1973:

Winter activity of soil invertebrates of mountain taiga in the Gornaya Shoriya. Ekologiya (Sverdlovsk), 3: 97-99. In Russian. Kononenko, A.P.; Sarviro, V.S.; Trofimov, S.S.

NAL/CAIN

Beskin, I.A., 1973:

Preservation of natural environments and planning the transportation net of the north (Sokhranenie prirodnoi sredy i formirovanie transportnoi seti Severa) Problemy severa 1973 vol. 18 p. 228-232. In Russian. 5 refs.

28-3762

Biogeocenoses of Taymyr tundra and their productivity. (Vol.1), 1971: (Biogeotsenozy Taimyrskoi tundry i ikh produktivnost') Leningrad, Nauka. In Russian with English summaries. (Main entry not included in CRREL Bibliography; papers only included through p. 197)

BROWN

Biogeocenoses of Taymyr tundra and their productivity (Vol. 2) (Biogeotsenozy Taimyrskoi tundry i ikh produktivnost'. Vyp. 2). Leningrad, Nauka, 1973, 207 p. In Russian. For individual papers see 28-4109 through 28-4116. Numerous references.

Tundra soils
Tundra vegetation
Soil formation
USSR--Taymyr Peninsula

28-4108

Biological problems of the North (Biologicheskie problemy Severa). Akademiia nauk SSSR. Dal'nevostochnyi tsentr. Severo-Vostochnyi Kompleksnyi Institut. Magadan, 1971, 239 p. Its Trudy, Vol. 42. In Russian with English table of contents enclosed. For selected articles see Nos. 26-1842 through 26-1848.

Tundra soils
Tundra vegetation
Plant ecology

26-1841

Biological Problems of the North, 6th Symposium, Vol. 4: Sporiferous plants, plant introduction, and fodder production (summaries of the papers) (Biologicheskii problema Severa, VI simpozium, Vypusk 4: sporovye rasteniia, introduktsiia rastenii i polevoe kormoproizvodstvo (Tezisy dokladov); Simpozium Biologicheskii problema Severa, I Akutsk, 1974. Yakutsk, Akademiia nauk SSSR, 144 p. In Russian.

29-3652

Biological Problems of the North, 6th Symposium; Vol. 6: Soil Science and Earth Resources (summaries of the papers) (Biologicheskii problema Severa, VI simpozium; Vypusk 6: Pochvovedenie i zemel'nye resursy (Tezisy dokladov)) Simpozium Biologicheskii problema Severa, I Akutsk, 1974. Yakutsk, Akademiia nauk SSSR, 176 p. In Russian with English table of contents enclosed.

29-1063

Biological Problems of the North, 6th Symposium, Vol. 7: Plant physiology and biochemistry (summaries of the papers) (Biologicheskii problema Severa, VI simpozium, Vypusk 7: fiziologiya i biokhimiia rastenii (Tezisy dokladov)) Simpozium Biologicheskii problema Severa, I Akutsk, 1974. Yakutsk, Akademiia nauk SSSR, 186 p. In Russian.

29-3673

-- 1974:
Biological resources of the dry land of the far north. CRREL Translation TL 431. Oct. 1974. Translated from Vestnik Akad. Nauk SSSR no. 9, 1972, p. 5-9. For Russian original see 27-20005.

Tundra regions.
USSR - Far north.

BROWN

-- 1972:
Biological resources of the northern USSR. Biologicheskii resursy sushi Krainego Severa. Akademiia nauk SSSR. Vestnik Spt. 1972 No. 9. p. 5-9. In Russian.

Tundra regions.
USSR--Far north.

27-2005

Blagodatskikh, L.S., 1973:

Leafy mosses in the Taymyr station region (West Taymyr) (Listostebel'nye mkhi raiona taimyrskogo statsionara (Zapadnyi Taymyr)). Biogeotsenozy Taimyrskoi tundry i ikh produktivnost'. Vyp. 2 (Biogeocenosy of Taymyr tundra and their productivity. Vol. 2). Leningrad, Nauka, 1973, p. 107-119. In Russian with English summary. 7 refs.

Tundra vegetation
Mosses
Plant ecology

28-4114

Blintsov, I.K., 1973:

The course of natural reforestation in depleted peat bogs. Lesoved Lesn Knoz, 7: 108-113. In Russian. Zastenskii, E.I.

NAL/CAIN

Blintsov, I.K. et al., 1973:

Microbiological and fermentative activity of drained peat soils of pine forests (O mikrobiologicheskoi i fermentativnoi aktivnosti osushennykh torfianykh pochv pod sosnovymi nasazhdeniiami). Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Nauchnye doklady vysshei shkoly. Biologicheskii nauki, 1973, No. 10, p. 119-123. In Russian. 13 refs. Ipat'ev, V.A.

Peat
Soil formation

28-2717

Bobov, N.G., 1974:

Changes in local climatic and geocryological conditions in subarctic mining centers (Napravlenie izmenenii mestnoi klimaticheskoi i geokriologicheskoi obstanovki v gornopromyshlennykh tsentrakh Subarktiki) Inzhenerno-geologicheskii i gidrogeologicheskii problemi gradostroitel'stva (Engineering geology and hydrogeology related to urban construction) Moscow, Gidrometeoizdat, p. 45-49. In Russian. Shvetsov, P.F.

30-1767

Boch, M.S. et al., 1970:

Comparative characteristics of the composition, structure and ecology of plant associations in the swamps and swampy forests of the Komi A.S.S.R. (K sravnitel'noi kharakteristike sostava, struktury i ekologii rastitel'nykh soobshchestv bolot i zabolochennykh redkolesii na severo-vostoche Komi ASSR) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskii osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North).

Boch, M.S. et al., 1970:

Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 45-52.
In Russian. 3 refs. Solonevich, N.G.

Subarctic soils.
Vegetation.
Plant ecology.

26-1698

Boch, M. S. et al., 1973:

List of mires of the European part of the USSR, requiring preservation (Spisok volot europ-eiskoi chasti SSSR, trebuushchikh okhrany). Botanicheskii zhurnal, 1973, 58(8), p. 1184-1196. In Russian. 10 refs. Mazing, V. V.

Plant ecology
Peat

28-1676

Boch, M.S. et al., 1970:

Quantitative evaluation of the relationship between soil and vegetation in tundra. (Kolichestvennaia otsenka svyazi rastitel'nosti i pochv v tundrovoi zone) Ekologiya 1970 No. 5 p. 25-34. In Russian. 9 refs. Vasilevich, V.I.; Ignatenko, I.V.

Tundra soils.
Tundra vegetation.
Ecosystems.

26-1058

Boch, M.S., 1970:

Quantitative evaluation of the association between vegetation and soil in the tundra zone. Ecology (N Y), 5:386-393. In English. Translated from Ekologiya: 5: 25-34 (CRREL 26-1058). Vasilevich, V.I.; Ignatenko, I.V.

NAL/CAIN

Boch, M.S. et al., 1971:

Soils and vegetation of the Yamal tundra (O nekotorykh osobennostiakh rastitel'nosti i pochv tundrovoi zony Yamala). Geograficheskoe obshchestvo SSSR. Izvestiia, Nov.-Dec. 1971, 103(6), p. 531-538. In Russian, 21 refs. Gerasimenko, T.V.; Tolchel'nikov, I.U.S.

Tundra
Plant ecology
Soil formation
USSR--Yamal Peninsula

26-2617

Boch, M.S. et al., 1971:

Swamps of Yamal (Bolota Yamala). Botanicheskii zhurnal, Oct. 1971, 56(10), p. 1421-1435. In Russian with English summary. 26 refs. Gerasimenko, T.V.; Tolchel'nikov, I.U.S.

Forest tundra
Tundra soils
Soil moisture migration

26-2532

Boch, M.S., 1974:

Tundra vegetation in the lower reaches of the Indigirka River (K flore nizov' ev r. Indigirki (v predelakh tundrovoi zony)) Botanicheskii zhurnal June 1974 59(6) p. 839-849. In Russian. 3 refs. Tsareva, V.T.

29-1292

Bogachova, I.A., 1972:

Leaf-eating insects on willows in tundra biocenoses of the southern Jamal. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, Tundra biome steering committee, April 1972. p. 131-132.

Tundra vegetation.

27-2668

Bogatyrev, L.G., 1974:

Biological cycle of ash elements in the Agapa station tundras (Biologicheskii krugvorot zol'nykh elementov v tundrakh statsionara "Agapa") Biologicheskii problema Severa, VI simpozium; Vypusk 6: Pochvovedenie i zemel'nye resursy (Tezisy dokladov) (Biological Problems of the North, 6th symposium' Vol. 6: Soil science and earth resources (Summaries of the papers)) Yakutsk, Akademiia nauk SSSR, p. 49-54. In Russian.

29-1068

Bogatyrev, L.G., 1974:

Dynamics of melting permafrost in tundra soils around Agapa station (Dinamika ottaivaniia merzloty v tundrovykh pochvakh statsionara 'Agapa') Pochvy i produktivnost' rastitel'nykh soobshchestv. Vyp. 2 (Soils and productivity of plant associations. Vol. 2) Moscow, MGU, p. 67-71. 11 refs. In Russian.

29-3326

Bogatyrev, L.G., 1972:

Rate and depth of thaw in tundra soils. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 229-232.

Tundra soils.
Thaw depth.

27-2685

Bogatyrev, L.G. et al., 1971:

Thermal regime of tundra soils in West Taymyr (K kharakteristike temperaturnogo rezhima tundrovyykh pochv (Zapadnyi Taymyr)). Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Nauchnye doklady vysshei shkoly. Biologicheskoe nauki, 1971, Vol. 10, p. 105-109. In Russian. 11 refs. Vasil'evskaia, V.D., Ivanov, V.V.

Tundra soils
Soil temperature
USSR--Taymyr

26-3227

Bogatyrev, L.G. et al., 1973:

Thermal regime of tundra soils in west Taymyr. U.S. Army Cold Regions Research and Engineering Laboratory, July 1973, TL 387, 6 p. AD-772 768. For Russian original see 26-3227. 1 refs. Vasil'evskaia, V.D., Ivanov, V.V.

Tundra soils

28-3029

Bogatyrev, L.G., 1975:

Transfer of vegetational litter in tundra biogeocenoses (Perenos rastitel'nogo opada v tundrovyykh biogeotsenozakh) Moscow. Universitet. Vestnik. Seriya 6 Biologiya i pochvovedenie Mar.-Apr. 1975 p. 91-94. In Russian with English summary. 6 refs.

30-329

Bogushevskii, A.A., 1975:

Methods of reclamation in the regions of permafrost. Drainage and irrigation. Gidrotekh Melior 10: 69-76. In Russian.

NAL/CAIN

(Lockheed)

Bogushevskii, A.A., 1974:

Soil improvement in the permafrost zone (Melioratsii v zone mnogoletnei meraloty) Moscow, Kolos, 254 p. In Russian with English table of contents enclosed. Refs. p. 244-250.

30-169

Bogushevskii, A.A., 1974:

Soil reclamation in permafrost zones (Melioratsii v zone mnogoletnei merzloty) Moskva: "Kolos", 252 p.

NAL/CAIN

(Lockheed)

Borzhonov, B.B., 1975:

The domestic reindeer industry influence on the flora and fauna of the tundra of the USSR. XXIII International Geographical Congress. Symposium: Geography of Polar Countries. Tour K-29. Leningrad, Hydrometeorological Publishing House, 1975. p. 134-135.

BROWN

Botanical studies in Yakutia, 1975:

(Botanicheskie issledovaniia v Iakutii) Yakutsk, Iakutskii filial Sibirskogo otdeleniia Akademii nauk SSSR, 153 p. In Russian. Refs.

30-3273

Botman, K.S., 1975:

Means of strengthening the soil-protecting and water-conserving influence of the alpine forests of Central Asia. Lesn Khoz 6: 41-44. In Russian.

NAL/CAIN

(Lockheed)

Bozhnova, T.A., 1972:

Podsol soils in forest zones of the eastern part of the European USSR (K izucheniiu podzolistykh pochv na vostoke lesnoi zony evropeiskoi chasti SSSR). Vsesoiuznaia akademiia sel'skokhoziaistvennykh nauk. Tsentral'nyi muzei pochvovedeniia. Sbornik trudov, 1972, Vol. 5. Geografiia, genezis i plodorodie pochv (Geography, formation and fertility of soils), p. 48-72. In Russian. 15 refs.

Soil profiles.

Taiga soils.

Taiga vegetation.

28-364

Bratsev, A.P. et al., 1973:

New form of utilization and preservation of northern landscapes (Novaia forma okhrany i ispol'zovaniia landshaftov Severa). Problemy severa, 1973, Vol. 18, p. 111-118. In Russian. 5 refs. Gladkov, V.P.

Subarctic soils
Plant ecology

28-3749

Broido, A.G., 1974:

Evaluating several methods of determining the elements of heat balance in the active layer (Otsenka nekotorykh metodov opredeleniia elementov teplovogo balansa deiatel'nogo sloia) Leningrad. Glavnaia geozicheskaiia observatoriia. Trudy 1974 Vol. 340 p. 74-99. In Russian 20 refs.

30-233

Buks, I.I., 1972:

Principles of composing legends for small-scale review maps of tundra vegetation in the Asiatic part of Russia (Printsipy sostavleniia legendy melkomasshtabnoi obzornoii karty rastitel'nosti Aziatskoi Rossii (na primere tundrovoi rastitel'nosti)) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSK (Soil and vegetation of permafrost regions in the USSR) p. 110-114. In RUSSIAN with ENGLISH summary,

30-689

Buks, I.I., 1975:

Some problems in classification of the vegetation of Yakutia in relation to the compiling of a small-scale survey map (Nekotorye voprosy klassifikatsii rastitel'nosti IAKutii v sviazi s sostavleniem melkomasshtabnoi obzornoii karty) Botanicheskie issledovaniia v IAKutii Yakutsk, IAKutskii filial SO AN SSR, p. 61-67. In Russian. 6 refs.

30-3275

Budaeva, S.E., 1976:

Regularities of lichen distribution in Barguzin reservation (Buriat ASSR) (Zakonomenosti raspredeleniia lishainikov Barguzinskogo zapovednika (Buriatskaia ASSR)) Botanicheskii zhurnal Mar. 1976 61(3) p. 395-406 In Russian. 12 refs.

30-4097

Bulatova, I.K., 1974:

Standing crop in mountain tundras of the north Urals and their change during successions (Zapasy fitomassy v gornykh tundrah Severnogo Urala i ikh izmenenie v khode suksessii) Ekologiya Nov.-Dec. 1974 No. 6 p. 29-36. In Russian. 4 refs.

29-3121

Bulatova, I.K., 1972:

Variation in surface biomass of alpine tundras in the north Ural Mountains during successions (Izmenenie nadzemnoi massy rastenii v gornykh tundrah Severnogo Urala v khode suksessii) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 309-313. In Russian with English summary. Refs.

30-705

Bulgakov, V.A. et al., 1973:

Interpretation of aerial photographs of swamps in the lower Amur river plains (Deshifirovanie bolot Nizhneamurskikh nizmennostei po aerofotosnimkam). Prirodnye osobennosti bolot Priamur'ia (Natural characteristics of swamps in the Amur River area). Novosibirsk, Nauka, 1973, p. 132-141. In Russian. 4 refs. Prozorov, I.U.S.

Vegetation
Patterned ground
Geobotanical interpretation

28-3490

Bulvchev, V.G. et al., 1972:

Properties of peat soils. Svoistva torfianykh gruntov Russia. Ministerstvo vysshego i rednego spetsial'nogo obrazovaniia. Izvestiia vysshikh uchebnykh zavedenii. Stroitel'stvo i arkhitektura. 1972 No. 7. p. 110-117. In Russian. 9 refs. Amarian, L.S. Baxin, E.T. Lishtvan, I.I.

Peat.
Soil moisture migration.

27-2283

Buryqin, V.A. et al., 1971:

Winter hardness of vegetation in central Asian deserts. O stoikosti rastitel'nosti pustyn' Srednei Azii k nizkim temperaturam vo vremia zimovki. Problemy osvoeniia pustyn', 1971 No. 6, p. 3-12. In Russian with English and Turkmenian summaries, 7 refs. Markova, L.E.

Desert soils.
Vegetation.
Alpine vegetation.

27-36

Buzunova, I.O., 1974:

Natural renewal in birch groves of Srednyaya Pinega (Estestvennoe vozobnovlenie v proizvodnykh berezniakakh Srednei Pinegi) Leningrad. Universitet. Vestnik. Geologiya-geografiya Sept. 1974 18(3) p. 125-127. In Russian with English summary. 5 refs.

Chaika, V.E., 1972:

Ecological peculiarities of microflora in surface-gley tundra soils (Ekologicheskie osobennosti mikroflory tundrovyykh poverkhnostno-gleevykh differentsirovannykh pochv) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 99-101. In Russian with English summary. 5 refs.

30-686

Chalaia, I.P., 1972:

Landscape map of Tien Shan (Landshaftnaia karta Tian'-Shania). Landshaftnoe kartografirovaniye i fiziko-geograficheskoe raionirovaniye gornykh oblastei (Landscape mapping and physiographic zoning of mountain regions), N.A. Gvozdetskii, ed. MGU, 1972, p. 208-219. In Russian. 13 refs.

Alpine soils.
Alpine vegetation.
USSR--Tien Shan

28-735

Charushnikova, V.V., 1971:

Podzolic soils of central taiga developing on morainal loam beneath pines in the European U.S.S.R. (Podzolistye pochvy srednei taigi evropeiskoi chasti RSFSR pod el'nikami na morennykh suglinkakh). Leningrad. Universitet. Vestnik. Geologiya-geografiya, June 1971, 12(2), p. 124-131. In Russian with English summary. 15 refs.

Taiga vegetation
Taiga soils
Soil formation

26-2520

Charushnikova, V.V., 1971:

Soils of some pine forests near the central course of the Kyma River--A right tributary of the Mezen' River (Pochvy nekotorykh tipov el'nikov v raione srednego techeniia r. Kymy--pravogo pritoka r. Mezen'). Leningrad. Universitet. Vestnik. Geologiya-geografiya, Dec. 1971, 24(4), p. 115-122. In Russian with English summary. 6 refs.

Taiga soils
Soil formation
Clay soils
Peat

26-2891

Chashchina, N.I., 1971:

Results of investigations of moisture migration during evaporation from sandy-loam chestnut soils (Itoqi issledovaniia peredvizheniia vlagi v protsesse ispareniiia v supeschanykh kashtanovykh pochvakh). Chashchina, N.I. Fizika pochv Zapadnoi Sibiri (Soil physics of West Siberia); Edited by V.P. Panfilov and R.V. Kovalev. Novosibirsk, Nauka, 1971, p. 78-101. In Russian. 32 refs.

Soil moisture migration
Soil temperature

28-58

Chepurko, N.L., 1971:

Biological productivity and chemical element cycle in forest and tundras of the Khibiny Mountains (Biologicheskaiia produktivnost' i krugovorot khimicheskikh elementov v lesnykh i tundrovyykh soobshchestvakh Khibinskikh gor). Biologicheskaiia produktivnost' i krugovorot khimicheskikh elementov v rastitel'nykh soobshchestvakh (Biological productivity and mineral cycling in terrestrial plant communities). Leningrad, Nauka, 1971, p. 213-219. In Russian. 1 refs. 0H541.3.B56

2

Chepurko, N.L., 1971

Mountain soils
Taiga soils
Tundra soils
Biomass

28-2757

Chepurko, N.L., 1972:

Biological productivity and the cycle of nitrogen and ash elements in the dwarf shrub tundra ecosystems of the Khibini mountains (Kola Peninsula). International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 236-247. 4 refs.

2

Chepurko, N.L., 1972:

Tundra vegetation.
Plants (Botany).
Ecosystems.
Biological Productivity.

27-2687

Chepurko, N.L., 1972:

Structure and annual balance of biomass in the Khibiny Mountain forests (Struktura i godovoi balans biomassy v lesakh Khibinskogo gornogo massiva) Pochvy i produktivnost' rastitel'nykh soobshchestv. Vyp. 1 (Soils and productivity of plant communities. Vol. 1) Moscow, MGU, p. 94-116. In Russian. 16 refs.

27-1229

Chernov, I.U.I., 1972:

Animal Population structure in the subzone of typical tundras of the western Taymyr. International Biological Programme, Tundra Biome: Proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, Tundra Biome Steering Committee, April 1972. p. 63-79. 21 refs.

Tundra soils.
USSR-Taimyr.

27-2658

Chernov, I.U.I., 1972:

Biocenological studies of tundra invertebrates (Printsiipy i metody biogeotsenologicheskogo izucheniia bespozvonochnykh tundrovoi zony). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 96-113. In Russian. 52 refs.

Tundra soils.
Ecosystems.
Tundra vegetation.

28-1264

Chernov, I.U.I., 1971:

Complex of the soil invertebrates in the spot-medallion tundras of western Taymyr. (Biogeocenoses of Taymyr tundra and their productivity, Vol. 1) Leningrad, Nauka, p. 198-211.

BROWN

Chernov, I.U.I., 1973:

Geozological characteristics of the region of Taymyr biogeocenological station. (Biogeocenoses of Taymyr tundra and their productivity. Vol. 2) Leningrad, Nauka, p. 187-200. In Russian with English summary.
N.A. Not itemized in CRREL Bib., itemization ended with p. 138.

BROWN

Chernov, I.U.I., 1973:

The peculiarities of vertical distribution of invertebrates in soils of tundra zone. (Biogeocenoses of Taymyr tundra and their productivity. Vol. 2) Leningrad, Nauka, p. 166-179. In Russian with English summary.

N.B. Not itemized in CRREL Bib., itemization ended with p. 138.

BROWN

Chernov, I.U.I., 1976:

Polar deserts of the Taymyr peninsula (Poliarnye pustyni poluostrova Taymyr) Botanicheskii zhurnal Mar. 1976 61(3) p. 297-311 In Russian. 15 refs.

30-4095

Chernov, I.U.I., 1975:

Soil invertebrates in the tundra of western Taymyr: Selected articles from biogeocenoses of Taymyr tundra and their productivity vol. 2, 1973. International Tundra Biome translation Jan. 1975, no.12.

BROWN

Chernov, I.U.I., 1975:

Tareya, USSR. Sweden. Statens naturvetenskapliga forskningsrad. NFR ecological bulletins 1975 No. 20. International Meeting on Biological Productivity of Tundra, 5th: IBP Tundra Biome, Abisko, Sweden, April 16-24, 1974. Structure and function of tundra ecosystems, edited by T. Rosswall and O.W. Heal. p. 159-181. 9 refs.

30-2202

Chertovskoi, V.G., 1974:

Taiga forestry (Taezhnoe lesovodstvo) Lesnaia promyshlennost', 231 p. In Russian with English table of contents enclosed. Refs. p. 214-229. Melekhov, I.S.; Krylov, G.V.; Ageenko, A.S.; Talantsev, N.K.

29-1465

Chizhikov, P.N., 1970:

Zonal characteristics of tundra and forest-tundra soils as reflected in the museum exposition (Otrazhenie zonal'nykh osobennostei v pochvakh tundry i lesotundry v ekspozitsii muzeia). Zhizn' zemli; sbornik, 1970, Vol. 6, p. 120-126. In Russian.

Forest tundra
Tundra soils
Arctic soils

26-2504

Chugunova, R.V., 1971:

Reforestation of cut-over pine stands in southwest Yakutia (Vozobnovlenie sosnovykh vyrubok v iugozapadnoi IAKutii) Respublikanskoe soveshchanie po okhrane prirody IAKutii, 5th, Irkutsk, 1971. Okhrane prirody IAKutii (Conservation in Yakutia) Irkutsk, Vostochno-Sibirskoe knizhnoe izd-vo, p. 82-88. 5 refs. In Russian.

Chukanov, V.I., 1971:

Effectiveness of nitrogen fertilizers in grey forest soils of the Novosibirsk region. Effektivnost' azotnykh udobrenii v sviazi s sodержaniem usvoiaemogo azota v serykh lesnykh pochvakh Novosibirskoi oblasti. *Agrokhiimiia*, Nov. 1971, No. 11, p. 11-14. In Russian. 8 refs.

Forest soils.
Soil composition.
USSR--Novosibirsk.

27-132

Conservation in Yakutia, 1971:

(Okhrana prirody IAKutii) Respublikanskoe soveshchanie po okhrane prirody IAKutii, 5th, Irkutsk, 1971. Irkutsk, Vostochno-Sibirskoe knizhnoe izd-vo, 228 p. In Russian. Numerous refs.

29-3800

Danilov, I.D., 1973:

Genetic relation between peat bogs with flat and convex hummocks (O geneticheskoi vzaimosviasi ploskobugristykh i vypuklobugristykh torfianikov). *Prirodnye usloviia Zapadnoi Sibiri*, 1973, Vol. 3, p. 150-159. In Russian, 16 refs.

Hummocks.
Cryogenic processes.
Palsas.

28-270

Dashkevich, Z.V., 1973:

Elementary geosystems of tundra (Elementarnye geosistemy v usloviakh tundry). *Geograficheskoe obshchestvo SSSR. Izvestiia*, March-April 1973, 105(2), p. 118-127. In Russian. 14 refs.

Tundra soils.
Patterned ground.
Tundra vegetation.

28-101

Dashkevich, Z.V., 1971:

Morphology of tundra landscapes in the Malozemel'skaia and Bol'shezemel'skoi tundra. Leningrad. Universitet. *Uchënye zapiski. Seriiã geograficheskikh nauk*, 1971, 21(358), p. 100-115. In Russian. 7 refs.

Tundra terrain.
Tundra vegetation.
Plant ecology.

28-505

Dedkov, V. S., 1971:

Variation in properties of surface-gley soil in the Ob' forest tundra in relation to spotting processes (Izmenenie svoistv poverkhnostno-gleyvykh pochv priobskoi lesotundry v sviazi s protsessami piatnoobrazovaniia) *Ekologiiã 1971* No. 2 p. 35-44. In Russian. 17 refs.

Forest tundra.
Tundra vegetation.
Ecology.

26-1053

Demidenko, V.P., 1971:

Productivity of aspen forests in Tomsk region (O produktivnosti osinnikov Tomskoi oblasti). *Akademiia nauk SSR. Sibirskoe otdelenie. Biologicheskii institut. Trudy po lesnomu khozhiaistvu Zapadnoi Sibiri*. 1971, Vol. 9, p. 32-40. In Russian. 25 refs. SD95.A6

Taiga vegetation.
Taiga soils.

28-116

Derviz-Sokolova, T.G., 1970:

Vegetation and its peculiarities in the area of the 'Ust-belaia Village (Middle course of the Anadyr' River). (Rastitel'nyi pokrov i osobennosti flory v raione poselka Ust' Belaia (srednee techenie r. Anadyr')) *Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniã prirody Severa (Biological basis for the utilization of natural resources in the North)* Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 60-64.

2

Derviz-Sokolova, T.G., 1970:
In Russian. 7 refs.

Tundra soils.
Tundra vegetation.
Plant ecology.

26-1700

D'iachenko, A.P., 1976:

Photosynthesis of arctic mosses under natural conditions (Fotosintez arkticheskikh mkhov v estestvennykh usloviakh) *Ekologiya* Jan.-Feb. 1976 No.1 p. 92-95. In Russian. 5 refs.

30-4111

D'iakonova, A.A., 1970:

Soils of some plant associations in the southeastern Altay (Pochvy nekotorykh rastitel'nykh assotsiatsii iugo-vostochnogo Altaia). *Ekologo-morfologicheskie i biokhicheskie osobennosti poleznykh rastenii dikorastushchei flory Sibiri* (Ecologic-morphological and biochemical properties of useful plants of the Siberian wild flora). Novosibirsk, Nauka, 1970, p. 272-286. In Russian. SB108.R9E38

2

D'iakonova, A.A., 1970

Mountain soils
Alpine vegetation
Plant ecology
USSR--Altay Mountains

26-1922

D'iakonova, A. A., 1973:

Soils of the terrace above the floodplain of the Ob' in the Novosibirsk reservoir region (Pochvy nadpoinennykh terras Obi v raione Novosibirskogo vodokhranilishcha). *Rastitel'nost' Priob'ia i ee khoziaistvennoe ispol'zovanie lesostepnykh raionov Priob'ia*. Novosibirsk, Nauka, 1973, p. 242-255. In Russian. 2 refs.

Soil composition
Soil moisture
Forest soils

28-1935

D'iakov, V.N., 1973:

Erosion processes in felling areas of the Carpathian Mountain forests. *Lesovedenie*, 3: 55-56. In Russian. English summary.

NAL/CAIN

D'iakov, V.N., 1974:

Erosion processes in felled areas in the mountain forests of the Carpathians. *Soviet hydrology: selected papers 1973* (Publ. Oct. 1974) No. 3 p. 273-276. 5 refs. Transl. from *Lesovedenie*, No.3, 1973, p. 55-59.

29-2269

D'iakov, V.N., 1972:

On erosion processes in relation to lumbering operations in the Carpathians. *Lesovod Agrolesomeliator*, 31: 78-83. In Russian.

NAL/CAIN

Dimo, V.N., 1971:

Basic characteristics of the heat regime of soil with underlying thawed and frozen rocks. *Osnovnye osobennosti teplovogo rezhima pochv, podstilaemykh talymi i mnogoletnemerzlymi porodami. Klimat pochvi.* (Soil climate. Proceedings of the Conference of the Scientific Council on the Study of Climatic and Agroclimatic Resources, Nov., 1969). Leningrad, Gidrometeoizdat, 1971, p. 19-30. In Russian. 6 refs. S600.M55

Soil temperature.

27-1030

Dimo, V.N., 1973:

Thermal conditions of soils in permafrost regions as a factor in the processes of cryogenesis and pedo-cryogenesis (*Termicheskie uslovia pochv oblasti mnogoletnemerzlykh porod kak faktor protsessov kriogeneza i pedokriogeneza*). International Conference on Permafrost, 2nd, Yakutsk, 1973, Vol. 1, p. 20-28. In Russian. 5 refs.

Cryogenic soils.
Soil formation.

28-1016

Distribution, renewal, and cultivation of Siberian cedar in European north of the USSR (*Kedr sibirskii na evropeiskom severe SSSR ego rasprostranenie, vozobnovlenie i kul'tura*). *Akademiia nauk SSSR. Vsesoiuznoe botanicheskoe obshchestvo*. Leningrad, Nauka, 1972, 84 p. In Russian. Numerous references. For individual papers see 28-0128 through 28-0132.

Forest soils.
Forest ecosystems.
Forest tundra.

28-128

Dmitrieva, E. V., 1973:

Pine forests of the northwestern part of the Karelian Isthmus (*Sosnovye lesa severo-zapada Karel'skogo peresheika*). *Botanicheskii zhurnal*, 1973, 58(8), p. 1093-1107. In Russian with English summary. 32 refs.

Taiga vegetation
Plant ecology
Lichens

28-1673

Dmitrieva, E.V., 1973:

Spruce forests in the northwest of the Karelian isthmus (El'niki severo-zapadnoi chasti Karel'skogo peresheika). Lesovedenie, March-April, 1973, No. 2, p. 51-64. In Russian with English summary. 16 refs.

Taiga vegetation.
Plant ecology.
Taiga soils.

28-1301

Dobrovolskii, G.V. et al., 1971:

Microflora of the secondary-podsol soils in West Siberia (O mikroflore vtorichno-podzolistykh pochv Zapadnoi Sibiri). Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Nauchnye doklady vysshei shkoly. Biologicheskie nauki, 1971, Vol. 9, p. 112-117. In Russian. 14 refs. Nikitin, D.I., Mazurenko, A.N.

Podsols

26-3226

Dolgushin, I.IU., 1972:

Recent swamp-forming processes in the central Taiga near the Ob' River. Sovremennye bolotoobrazovatel'nye protsessy v srednetaezhnom Priob'e. Akademiia nauk SSSR. Izvestiia. Seriiia geograficheskaiia. Mar.-Apr. 1972 No. 2. p. 26-38. In Russian. 17 refs.

Peat.
Taiga soils.
Taiga vegetation.

27-1774

Dolukhanov, A.G., 1970:

Types of mountain forests according to natural relative continuity of their plant cover. Voprosy tipologii gornyykh lesov v svyazi s trirodnoi otноситel'noi nepreryvnosti ikh rastitel'nogo pokrova. Moskovskoe obshchestvo ispytatelei prirody. Trudy, 1970 Vol. 38, p. 24-33. In Russian with English summary. 32 refs.

Mountain soils.
Forest soils.
Forest ecosystems.

27-305

Dorofeeva, N.A., 1974:

The quantitative composition of humus in alpine Chestnut soils of Tuva ASSR. Izv Timiriazevsk S-kh Akad 1: 65-73. In Russian. English summary. Kaurichev, I.S.

NAL/CAIN

(Lockheed)

Dorogostaiskaia, E.V., 1972:

Influence of man on the vegetation of the Tareya settlement. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, Tundra biome steering committee. April 1972. p. 199-200. 1 ref.

Tundra vegetation.

27-2678

Dorogostaiskaia, E.V. et al., 1973:

Soil algae of the West Taymyr tundras (Pochvennye vodorosli tundr Zapadnogo Taymyra). Biogeotsenozy Taymyrskoi tundry i ikh produktivnost'. Vyp.2 (Biogeocenoses of Taymyr tundra and their productivity. Vol. 2). Leningrad, Nauka, 1973, p. 128-138. In Russian with English summary. 10 refs. Sdobnikova, N.V.

Tundra vegetation
Tundra soils
Plant ecology
USSR--Taymyr Peninsula

28-4116

Dorogostaiskaia, E.V., 1972:

Weeds of the far North of the U.S.S.R. (Sornye rasteniia Krainego Severa SSSR). Leningrad, Nauka, 1972, 172 p. In Russian with English summary and table of contents enclosed. 288 refs.

Arctic soils.
Arctic vegetation.

Data on the taxonomy, ecology and geographic distribution of native and introduced flora in the Arctic and Subarctic regions of the USSR are given.

2

Dorogostaiskaia, E.V.

Man's influence on the distribution of plants and adaptations to new ecosystems of newly introduced plants are discussed. A comparison of Arctic and Antarctic flora (p. 30-33) shows that Arctic plants had favorable conditions to spread freely to the North during a long period of time and became hardy to the severe environment, resisting attempts of new species to survive, unless ecological conditions change. Plant species brought to Subantarctic islands and adapting not to environment, but to survival

3

Dorogostaiskaia, E.V.

during a long travel over the ocean have propagated widely, almost completely replacing native plants. Antropochorous cosmopolitan plants of the Far South are listed.

28-629

Drachkov, V.N., 1970:

The effect of mice and birds on spruce reforestation. (*Picea*) *Les Zh*, 6: 141-142. In Russian.

NAL/CAIN

Drachkov, V.N., 1972:

Trunks of pine trees of the European north affected by cancer (*Rak stvolov v nasazhdeniakh sosny evropeiskogo Severa*). *Lesnoe khoziaistvo*, Oct. 1972, No. 10, p. 64-65. In Russian.

Taiga soils.
Taiga vegetation.
Fungi.

28-503

Dubovets, A.G., 1971:

High bog vegetation of the Drut'Berezina interfluvium (*Rastitel'nost' verkhovykh bolot Drut' Berezinskogo mezhdurech'ia*). *Vsesoiuznoe botanicheskoe obshchestvo. Belorusskoe otdelenie. Botanika*, 1971, Vol. 13, p. 35-40. In Russian. 9 refs.

Peat
Vegetation
Plant ecology

26-2500

Dylis, N.V., 1974:

Program and methods of biogeocoenological investigations (*Programma i metoda Biogeotsenologicheskikh issledovaniy*) Moscow, Nauka, 403 p. In Russian with English table of contents. refs. p. 375-401.

29-2756

Dzhuraev, A.D., 1974:

Vegetation of primary alpine rock wastes of the Gissarskii Range and its role in their reinforcement. *Probl Bot (Leningr)*, 12: 142-144. In Russian.

NAL/CAIN

Egorov, A.D., 1971:

Trace element migration and accumulation in the vegetation of Yakutia (*Migratsiya i akumulatsiya mikroelementov v rasteniyakh Iakutii*). *Biologicheskaya produktivnost' i krugovorot khimicheskikh elementov v rastitel'nykh soobshchestvakh* (Biological productivity and mineral cycling in terrestrial plant communities). Leningrad, Nauka, 1971, p. 273-277. In Russian. 8 refs. OH541.3.B56

Subarctic soils
Tundra vegetation
Taiga vegetation

28-2758

Egorov, O.V., 1972:

Program for studying large mammals in the Arctic and Subarctic (*Programma izucheniya krupnykh nazemnykh mlekopitaiushchikh Arktiki i Subarktiki*). *Izucheniye biogeotsenozov tundry i lesotundry* (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 115-117. In Russian.

Tundra vegetation.

Plant ecology.

Ecosystems.

28-1266

El'chaninov, E.A., 1976:

Environmental protection during the construction and operation of mines in permafrost regions. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. *CRREL TL 518*, p. 31-33.

BROWN

Elovskaya, L.G., 1972:

Cryogenic north taiga soils in the Iukagirskoe plateau (*Merzlotnye severotaezhnye pochvy Iukagirskogo ploskogor'ia*) *Vsesoiuznyi simpozium po biologicheskim problemam Severa*, 5th, Magadan, Apr. 18-22, 1972. *Pochvy i rastitel'nost' merzlotnykh raionov SSSR* (Soil and vegetation of permafrost regions in the USSR) p. 56-62. In Russian with English summary. 11 refs. Teterina, L.V.; Petrova, L.I.

30-679

Elovskaya, L.G., 1974:

Melioratsiya merzlotnykh pochv Iakutii) *Biologicheskie problemy Severa*, VI simpozium; *Byusk 6: Pochvovedenie i zemel'nye resursy (Tezisy dokladov)* (Biological Problems of the North, 6th symposium; Vol.6: Soil science and earth resources (Summaries of the papers)) Yakutsk, Akademiya nauk SSSR, p. 57-65. In Russian. Kono-rovskii, A.K.

29-1069

Elovskaya, L.G., 1975:

Soil formation conditions and peculiar tundra soils in northeastern USSR (*Usloviya pochvoobrazovaniya i osobennosti tundrovnykh pochv severo-vostoka SSSR*) *Vsesoiuznaya konferentsiya Pochvennyy kriogenez i melioratsiya merzlotnykh i kholodnykh pochv*. Pushchino, Oct., 1975, *Materialy* Moscow, Nauka, p. 29-32. In Russian. 4 refs.

30-4226

Environment protection in relation to economic development of permafrost regions. Abstracts of papers presented at a conference (Okhrana obruzhaiushchei sredy v svyazi s rasprostraneniia mnogoletnemerzlykh porod. Tezisy dokladov) Melnikov, P.I. ed. Yakutsk, 1975 141 p. In Russian with English table of contents enclosed.

30-2381

Ermolaev, V.I., 1972:

Studying algae in tundra water bodies (Izuchenie vodoroslevoi rastitel'nosti tundrovyykh vodoemov). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 84-86. In Russian.

Tundra vegetation.
Plant ecology.
Photosynthesis.

28-1261

Ershov, E.D. et al., 1973:

Ice sublimation in fine-grained soils of various cryogenic textures, upon their reaction with air (Sublimatsiia l'da v dispersnykh gruntakh razlichnogo kriogenogo stroeniia pri ikh vzaimodeistvii s vozdushnym potokom). International Conference on Permafrost, 2nd, Yakutsk, 1973 1973, Vol. 4, p. 185-188. In Russian. 6 refs. Gurov, V.V. Dostovalov, B.N.

Soil moisture migration.

28-1102

Euks, I.I., 1970:

Dynamics of the vegetational cover in the northern part of the central Siberian Plateau. Dinamicheskie tendentsii rastitel'nogo pokrova na severe Sredne-Sibirskogo ploskogor'ia. Akademiia nauk SSSR. Sibirskoe otdelenie. Institut geografii Sibiri i Dal'nego Vostoka. Doklady 1970 Vol. 28 p. 10-16. In Russian. 19 refs.

Forest tundra.
Tundra soils.
Tundra vegetation.

27-1818

Evdokimova, T.I., 1972:

Productivity of some plants in Karelia and their role in the soil formation processes. (O produktivnosti nekorotykh rastenii Karelii i ikh roli v protsessakh pochvoobrazovaniia) Pochvy i produktivnost' rastitel'nykh soobshchestv. Vyp 1 (Soils and productivity of plant communities. Vol. 1) Moscow, MGU, p. 177-130. In Russian. 14 refs.

27-1230

Fadin, I.A. et al., 1972:

Drying felled areas of bilberry heath and grass moors by surface drainage. Lesnoe khoziaistvo, Feb. 1972, No. 2, p. 41-43. In Russian. Smol'ianitskaia, L.B., Stadnitskaia, N.I.

Taiga soils.
Taiga vegetation.

27-388

Fedina, A.E., 1972:

Physiographic subdivision of the eastern part of the northern slope of the Caucasus (Fiziko-geograficheskoe raionirovanie vostochnoi chasti severnogo sklona Bol'shogo Kavkaza). Landshaftnoe kartografirovanie i fiziko-geograficheskoe raionirovanie gornyykh oblastei (Landscape mapping and physiographic zoning of mountain regions). N.A. Gvozdet'skii, ed. MGU, 1972, p. 5-96. In Russian. 84 refs.

Alpine soils.

Fedina, A.E.

Alpine vegetation.
Plant ecology.
USSR--Caucasus.

28-730

Fedorov, K.N. et al., 1972:

Manganic-ferrous formations in the taiga soils of the Ob'-Irtys interfluvium (Margentsovo-zhelezistye novoobrazovaniia v pochvakh taez'noi zony Ob'-Irtyskogo mezhdurech'ia). Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Nauchnye doklady vysshei shkoly. Biologicheskie nauki, 1972, No. 7, p. 125-129. In Russian. 6 refs. Shoba, S.

Taiga soils
Soil formation
Soil profiles

28-2714

Fedorova, N.M., 1972:

Hydrothermal regime of seasonally freezing and thawing soils and subsoils in the northern and central taiga of west Siberia (Gidrotermicheskie rezhimy sezononopromerzaiushchikh i sezonoprotaivaiushchikh pochvogruntov severnoi i srednei taigi Zapadnoi Sibiri) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soils and vegetation of permafrost regions in the USSR) p. 79-81. In Russian with English summary. 3 refs.

30-683

Fedorova, N.M., 1974:

Thermal and moisture regimes in a soil profile affected by prolonged seasonal freezing (middle taiga subzone, west Siberia). Geoderma 12(1/2, special issue): 111-119. In English.

NAL/CAIN

(Lockheed)

Fedorovskii, V.D., 1973:

Distribution and variability of geographic types of Ribes acidum turcz, ex Pojark, and Ribes hispidulum Pojark, in Siberia (O rasprostraneni i izmenchivosti geograficheskikh ras Ribes acidum Turcz, ex Pojark, i Ribes hispidulum Pojark, v Sibiri). Novosti geografii i sistematiki rastenii Sibiri (Geography and taxonomy of Siberian vegetation), ed. by A. P. Skabichevskii. Novosibirsk, Nauka, 1973, p. 24-30. In Russian. 17 refs.

Taiga vegetation
Tundra vegetation

28-2705

Fedotov, S.S., 1973:

Natural afforestation of drained transitional bogs (O estestvennom obleseni osushennykh perekhodnykh bolot) Kompleksnaia otsenka bolot i zabolochennykh lesov v sviazi s ikh melioratsiei (Complex evaluation of swamps and swampy forests in relation to land reclamation) Novosibirsk, Nauka, p. 104-112. In Russian. 13 refs.

29-1028

Filippova, L.N., 1972:

Dynamics of seasonal growth of certain perennial grasses in the tundra and forest belts of the Khibiny Mountains (Dinamika sezonnogo razvitiia nekotorykh vidov travianistykh mnogoletnikov v tundrovom i lesnom poiasakh Khibinskiikh gor) Flora i rastitel'nost' Murmanskoi oblasti (Murmansk Region vegetation) Leningrad, Nauka, p. 53-61. In Russian. 7 refs.

29-1406

Filippova, L.N., 1970:

Experience in accelerated establishment of grassland in forest tundra (Opyt uskorennoho zaluzheniia lesotundry) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knozhnoe izd-vo, 1970 p. 34-40. In Russian. 21 refs.

Tundra soils.
Tundra vegetation.
Mosses.

26-1696

Firsova, V.P., 1975:

Ash composition of plants in the northern taiga of the Urals (Zol'nyi sostav rastenii severotaezhnykh lesov Urala) Ekologiya May-June 1975 No.3 p. 30-35. In Russian. 14 refs. Pavlova, T.S.

30-1264

Firsova, V.P. et al., 1971:

Contents of gross and mobile forms of NPK in the overground vegetation, litter and soil of northern Taiga in the Urals (Soderzhanie valovykh i podivzhnykh form NPK v napochvennom rastitel'nom pokrove, podstilke i v pochve severotaezhnykh lesov Urala) Edologiya 1971 No. 1 p. 12-21. In Russian. 18 refs. Pavlova, T.S.

Taiga soils.
Taiga vegetation.
Ecology.

26-1050

Firsova, V.P. et al., 1970:

Humus composition and the properties of cedar-forest soils in the northern Ural Mountains (Sostav gumusa i svoistva pochv kedrovyykh lesov severnogo Urala). Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy, 1970, Vol. 76, p. 18-28. In Russian. 4 refs. Dergacheva, M.I.

Mountain soils
Forest soils
Alpine vegetation
USSR--Ural Mountains

26-1866

Firsova, V.P. et al., 1970:

Microflora composition, zymotic activity and properties of north taiga soils in the West Siberian plain (Svoistva, sostav mikroflory i fermentativnaya aktivnost' pochv severotaezhnoi podzony Zapadno-Sibirskoi nizmennosti). Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy, 1970, Vol. 76, p. 66-87. In Russian. 3 refs. Kulai, G.A., Khrenova, G.S.

Taiga vegetation
Taiga soils
Soil formation

26-1870

Firsova, V.P., 1970:

Soil formation in the north-taiga subzone of the Urals (Osobennosti pochvoobrazovaniia v severotaezhnoi podzone Urala). Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy, 1970, Vol. 76, p. 3-17. In Russian. 17 refs.

Taiga soils
Taiga vegetation
Plant ecology
USSR--Ural mountains

26-1865

Firsova, V.P. et al., 1970:

Soils along the Ob'-Ivdel' railroad line (Pochvy vdol'trassy zheleznoi dorogi Ivdel'-Ob'). Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy, 1970, Vol. 76, p. 88-114. In Russian. 24 refs. Pavlov, B.I.

Soil formation
Soil moisture
Taiga soils

26-1871

Firsova, V.P., 1974:

Soils of Kharp Research Station (Pochvy statsionara kharp) Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1974 Vol. 88 p. 13-27. In Russian. 29 refs. Dedkov, V.S.

30-442

Firsova, V.P., 1972:

Soils of the southern taiga and of the pine-broad leaved forests of Ural and the Transural region (Pochvy iuzhnoi taigi i khvoinoshirolokistvennykh lesov Urala i Zaural'ia) Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1972 vol. 85 p. 3-87. In Russian. 18 refs.

29-1228

Flora, vegetation and vegetational resources of Transbaikal and adjacent areas. Vol.5, 1975:

(Flora, rastitel'nost' i rastitel'nye resursy Zabaikal'ia i sopredelnykh oblastei. Vyp. 5) Chita, 179 p. In Russian with ebridged English table of contents enclosed.

30-2289

Forminykh, L.A., 1973:

Peculiarities of autonomous soil formation and geography of medium taiga soils of the western part of the Siberian Plateau (Osobennosti avtonomnogo pochvoobrazovaniia i geografii srednetaezhnykh pochv na zapade Sibirskoi platformy). Russia. Ministerstvu vysshego i srednego spetsial'nogo obrazovaniia. Nauchnye doklady vysshei shkoly. Biologicheskie nauki, 1973, No. 6, p. 115-120. In Russian. 3 refs.

Cryogenic soils
Soil profiles
Taiga soils

28-2715

Frozen ground and soil II: Biology, Chemistry, and Fertility of permafrost soils. Collected papers. Yakutsk, 1974.

BROWN

Gabeev, V.N., 1971:

Types of forest cultures in the Novosibirsk region (Tipy lesnykh kul'tur dlia Novosibirskoi oblasti). Akademiia nauk SSSR. Sibirskoe otdelenie. Biologicheskii institut. Trudy po lesnomu khoziaistvu Zapadnoi Sibiri. 1971, Vol. 9, p. 77-97. In Russian. 13 refs. SD95.A6

Taiga soils.
Taiga vegetation.

28-119

Galaktionov, B.V., 1976:

Basic environmental protection measures practiced during the development of gas-bearing regions in northern West Siberia. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 29-30.

BROWN

Galkina, N.V., 1974:

Biomass of basic plant communities growing in the Selenga River Delta (Fitomassa osnovnykh rastitel'nykh soobshchestv v del'te reki Selengi) Biologicheskie issledovaniia ozer Vostochnoi Sibiri (Biological studies of East Siberian lakes) Listvenichnoe na Baikale, p. 5-10. In Russian.

30-2298

Gar, K.A., 1975:

Soil microflora in certain types of south taiga pine forests (Mikroflora pochv nekotorykh tipov sosniakov iuzhnoi taigi) Lesovedenie Jan.-Feb. 1975 p. 73-81. In Russian. 14 refs.

30-1595

Garmonov, I.V., 1973:

Hydrogeology of the USSR. Vol. 4 (Gidrogeologiya SSSR. Vyp. 4) Moscow, Nedra, 278 p. (Pertinent p.239-267) In Russian. Refs. p. 270-278. Vsesoiuznyi nauchno-issledovatel'skii institut gidrogeologii i inzhenernoi geologii.

30-2279

Gasheva, A.F., 1974:

Biomass reserves in some communities of Kharp Research Station (Zapasy fitomassy nektorykh soobshchestv statsionara "Kharp") Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1974 Vol. 88 p. 106-107. In Russian. 4 refs.

30-449

Gauert, V.I., 1970:

Biological activity of gray forest soils and Chernozem meadow soils of the alpine region of the Altai Mountains. Akad Nauk SSSR Izv Sib Otd Ser Biol Nauk 3: 14-18. In Russian. Vyblou, N.F.;

NAL/CAIN (Lockheed)

Gavril'ev, P.P. et al., 1973:

Heat and moisture transfer processes of basin irrigation of meadows in central Yakutia (Protsesty tepic- i vlagooobmena pri limannom oroshenii lugov Tsentral'noi IAKutii). International Conference on Permafrost, 2nd, Yakutsk, 1973, 1973, Vol. 7, p. 259-261. In Russian. Ugarov, I.S., Rysakov, Zh.I., Mandarov, A.A.

Meadow soils.
Soil moisture.

28-1198

Gavrilova, M.K., 1975:

Thermal regime of Yakutia landscapes. XXIII International Geographical Congress. Symposium: Geography of Polar Countries. Tour K-29, Leningrad, July 22-26, 1976. Extended summaries. Leningrad, Hidrometeorologicheskii Publishing House, 1975. p. 49-50.

BROWN

Gavva, O.I., 1972:

Soil erosion on the Kamchatka Peninsula, its consequences and possible countermeasures (Protsesty erozii pochv na Kamchatke, ikh posledstviia i vozmozhnye sposoby zashchity) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 102-104. In Russian with English summary. 2 refs.

30-687

Geobotanical mapping. Geobotanicheskoe kartografirovaniie. Akademiia nauk SSSR. Botanicheskii Institut, Leningrad, Nauka, 1971. 83 p. In Russian with English table of contents. 234 refs. A collection of 5 articles, 3 reviews and one bibliographic contribution.

Geobotanical interpretation.
Taiga vegetation.
Taiga soils.

27-130

Gerasimenko, T.V. et al., 1974:

Dependence of photosynthesis in some plants on Wrangel Island on illumination intensity (Zavisimost' fotosinteza nektorykh rastenii ostrova Vrangelia ot intensivnosti osveshcheniia). Botanicheskii zhurnal, March 1974, 59(3), p. 377-386. In Russian. 28 refs. Kitsing, L.I.

Plant ecology
Arctic vegetation
Arctic soils
USSR--Wrangel Island

28-4227

Gerasimenko, T.V., 1973:

Dependence of photosynthesis in tundra plants of Wrangel Island on temperature. (Zavisimost' fotosinteza ot temperatury u rastenii tundr ostrova Vrangelia). Botanicheskii Zhurnal, April 1973, 58(4) p. 493-504. In Russian with English summary. 41 refs.

Tundra vegetation.
Photosynthesis.
USSR--Wrangel Island.

28-37

Gerasimenko, T. V. et al., 1973:

Diurnal and seasonal dynamics of photosynthesis in plants of Wrangel Island (Sutochnaia i sezonnaia dinamika fotosinteza u rastenii ostrova Vrangelia). Botanicheskii zhurnal, 1973, 58(11), p. 1655-1663. In Russian. 31 refs. Zalenskii, O.V.

Arctic vegetation
Arctic soils
USSR--Wrangel Island

28-1979

Gerasimov, I.P. et al., 1972:

Inner cycle of matter in the principal types of natural ecosystems of the USSR. Vnutrennii oborot veshchestv v glavnykh tipakh prirodnykh ekosistem na territorii SSSR. Akademiia nauk SSSR. Izvestiia. Seriya geograficheskaiia. Mar.-Apr. 1972 No. 2. p. 5-11. In Russian 5 refs. Isakov, I.U.A. Panfilov, D.V.

Tundra.
Taiga terrain.
Ecology.

27-1773

Gerasimov, I.P., 1974:

New soil map of the USSR. Trans Int Congr Soil Sci, 10th (v. 8): 36-43. In Russian. English summary. Egorov, V.V.; Karavaeva, N.A.; Rudneva, E.N.; Sokolov, I.A.; Tarful'ian, V.O.; Fridland, V.M.

NAL/CAIN

Getsen, M.V., 1970:

Heterogeneity of algae in tundra lakes (O geterogennosti al'goflory tundrovyykh ozer). Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North). Syktyvkar, Komi knizhnoe izd-vo, 1970, p. 258-262. In Russian. 29 refs.

Plant ecology
Tundra soils
Tundra vegetation
26-1728

Ghilarov, M.S., 1975:

Soil invertebrates in the communities of temperate zone. Resources of the biosphere (synthesis of the Soviet studies for the International Biological Programme) Vol. 1. Leningrad, Nauka, p. 218-240.

BROWN

Glazovskaia, M.A., 1972:

"Technobiogems" - the initial physiographic objects of landscape-geochemical predictions (Tekhnobiogemy - iskhodnye fizikogeograficheskie ob'ekty landshaftno-geokhimicheskogo prognoza). Moscow. Universitet. Vestnik. Seriya 5. Geografiia, Nov.-Dec. 1972, No. 6, p. 23-35. In Russian with English summary. 6 refs.

Tundra soils.
Tundra vegetation.
Taiga soils.
Taiga vegetation.

Glazovskaia, M.A.

"Technobiogem" is a term offered for use in predicting the effect of human activity on natural surroundings; it includes a group of landscape systems and is a subdivision unit of total landscape-geochemical conditions studied.

28-75

Global distribution, types, and characteristics of peat bogs. O rasprostraneni torfianikov na zemnom share, o tipakh ikh i priznakakh. Botanicheskii zhurnal, 1972, 57(2), p. 198-210. In Russian with English summary. 75 refs.

Peat.
Plant ecology.
vegetation.

27-18

Gol'dtman, V.G., 1976:

Possibilities of increasing subsurface drainage during economic development and restoration of lands in North-Eastern territories. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 13-14.

BROWN

Golov, G.V., 1971

Agrochemical characteristics of Amur Region soils (Agrokhimicheskaiia kharakteristika pochv Amurskoi oblasti). Agrokhimicheskaiia kharakteristika pochv SSSR. Dal'nii Vostok. Moscow, Nauka, 1971, p. 108-151. In Russian. 60 refs.

Soil formation
Alpine soils
Alpine vegetation
USSR--Amur River

26-3819

Golov, V.I., 1971:

Microelement content in the Far East soils and the effectiveness of microfertilizers (Soderzhanie mikroelementov v pochvakh Dal'nego Vostoka i effektivnost' mikroudobrenii). Agrokhimicheskaiia kharakteristika pochv SSSR. Dal'nii Vostok. Moscow, Nauka, 1971, p. 152-169. In Russian. 41 refs.

Soil formation
USSR--Far East

26-3820

Golovkin, B.N., 1972:

Problems related to biocenology of cultivated plants in the Far North (Problema kul'turbiogeotsenologii na Krainem Severe). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 51-53. In Russian.

Tundra soils.
Tundra vegetation.
Plant ecology.

28-1254

Golovkin, B. N., 1973:

Transplanting herbaceous perennials to the polar north (Pereselenie travianistykh mnogoletnikov na Poliarnyi Sever; Ekologo-morfologicheskii analiz). Leningrad, Nauka, 1973, 266 p. In Russian with English summary. Refs. p. 239-262.

Subarctic vegetation
Plant ecology

28-3188

Golovkin, B. N., 1975:

Transplanting herbaceous perennials to the arctic north. 262 p. CRREL TL 477.
For Russian original see 28-3188.

BROWN

Golovkina, G.W., 1971:

Ecologic and geographic analysis of some migrant plants tested in the polar-alpine botanical garden.
Ekologo-geograficheskii analiz vegetativno-podvizhnykh rastenii, ispytannykh v Poliarno-Al'piiskom botanicheskom sadu. Vvedenie v kul'turu novykh vidov poleznykh rastenii v usloviakh Krainego Severa (Introduction of new types of useful plants in the Far North). Leningrad, Nauka, 1971. p. 98-103.

Golovkina, G.W., 1971:

In Russian. 18 refs.

Arctic vegetation.
Arctic soils.
Tundra soils.

27-2586

Golovko, E.A., 1970:

Activating microbiological processes in the swamp soils of Kola Peninsula (Aktivizatsiia mikrobiologicheskikh protsessov v bolotnykh pochvakh Kol'skogo poluostrova) Akademiia nauk SSSR. Komi filial. Institut prirody Severa (Biogeoclimatic basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 157-162. In Russian.

Peat.
Soil formation.
Soil composition.
USSR-Kola Peninsula.

26-1717

Gol'tsberg, I.A. ed, 1971:

Soil climate. Klimat pochvy. Leningrad, Gidrometeoizdat, 1971, 256 p. Proceedings of a Conference of the Scientific Council on the Study of Climatic and Agroclimatic Resources, Nov., 1969. Numerous references. Davitaia, F.F. ed. S600.M55

Soil temperature.
Soil chemistry.

27-1029

Gorchakovskii, P.L., 1974:

Biomass and the dynamics of vegetational cover and animal population in forest tundra (Biomassa i dinamika rastitel'nogo pokrova i zhivotnogo naseleniia v lesotundre) Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1974 Vol. 88 Sverdlovsk, AN SSSR, 207 p. In Russian. Refs. Smirnov, V.S. ed

30-439

Gorchakovskii, P.L., 1970:

Early stages of vegetational succession on the most recent alluvium of the middle Ural River. Ecology (N Y) 5: 369-378. In English. Translated from Ekologiya: 5: 3-15. Veshkova, N.V.

NAL/CAIN

Gorchakovskii, P.L., 1975:

Initial productivity of certain meadow (plant) associations in the southern Urals. Ekologiya (Sverdlovsk), 3: 5-17. In Russian. Korobeinikova, V.P.

NAL/CAIN

Gorchakovskii, P. L. et al., 1973:

Phytoindication of climatic conditions at the tree line. Fitoindikatsiia klimaticheskikh uslovii na verkhnem predele lesa. Ekologiya 1973 No. 1 p. 50-65. In Russian. 58 refs. Shiatov, S. G.

Subarctic vegetation.
Alpine vegetation.

27-2608

Gorchakovskii, P.L. et al., 1972:

Productivity of some shrub, dwarf shrub and herbaceous communities of forest-tundra. International biological programme, tundra biome; Proceedings I & II International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 113-116. Andreiasakina, N.I.

Gorchakovskii, P.L. et al., 1972:

Tundra vegetation.
Forest tundra.
Plants (Botany).

27-2664

Gorchakovskii, P.L. et al., 1972:

Studying dynamic tendencies of basic botanical-geographic boundaries in the Arctic and Subarctic (Izuchenie dinamicheskikh tendentsii osnovnykh botaniko-geograficheskikh rubezhei v Arktike i Subarktike). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses) Leningrad, Nauka, 1972, p. 86-88. In Russian. Shiatov, S.G.

Deserts.
Tundra vegetation.
Forest tundra.

28-1262

Gorchakovskii, P.L., 1974:

Vegetation of Kharp Research Station (Rastitel'nost' statsionara "Kharp") Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1974 Vol. 88 p. 49-60. In Russian. 6 refs. Trotsenko, G.V.

30-444

Gorchakovskii, P.L., 1975:

The vegetation of the Urals on a new geobotanical map. Bot Zh, 60(10): 1385-1400. In Russian. English summary. Gribova, S.A.; Fedorova, I.T.; Sharaftudinov, M.I.; Isachenko, T.I.; Karpenko, A.S.; Nikonova, N.N.; Famelis, T.V.

NAL/CAIN

Gorodkov, K.B., 1972:

Faunistic-entomological techniques of studying tundra biocenoses (Metody entomologicheskoi faunistiki pri biogeotsenologicheskikh issledovaniakh v tundre). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 89-96. In Russian.

Tundra vegetation.
Plant ecology.
Ecosystems.

28-1263

Gorova, A.K., 1975:

Psychrophilic mycobacteria in tundra soils of Taymyr (Psikhrofil'nye mikobakterii v tundrovnykh pochvakh Taimyra) Moscow. Universitet. Vestnik. Seriya 6 Biologiya i pochvovedenie Mar.-Apr. 1975 No.2 p. 74-82. In Russian with English summary. 15 refs. Aseeva, I.V.; Vasil'evskaia, V.D.; Lysak, L.V.

30-328

Gorozhankina, S. M., 1973:

Sinusial character of the soil cover of cedar forests in the Tomsk region (Sinuzial'naiia struktura napochvennogo pokrova kedrovnikov Tomskoi oblasti). Botanicheskii zhurnal, 1973, 58(9), p. 1316-1325. In Russian. 15 refs.

Plant ecology
Taiga vegetation
Taiga soils

28-1671

Gorozhankina, S.M., 1975:

On subzonal (vegetation) division of forest zone in the Tomsk region. Bot Zh, 60(11): 1587-1596. In Russian. English summary. Konstantinov, V.D.

NAL/CAIN

Govorenkov, B.F., 1972:

Exchange of elements between soil and vegetation in pine and larch forests of the Karelian isthmus (Krugovorot elementov mezhdru rastitel'nost'iu i pochvoi v sosniake i listvennichnike na karel'skom peresheike). Vsesoiuznaia akademiia sel'skokhoziaistvennykh nauk. Tsentral'nyi muzei pochvovedeniia. Sbornik trudov, 1972, Vol. 5. Geografiia, genesis i plodorodie pochv (Geography, formation and fertility of soils), p. 103-130, in Russian. 23 refs.

Taiga vegetation.
Plant ecology
Taiga soils.

28-366

Gradusov, B.P., 1974:

Mineralogical composition of clay material from Taimyr tundra soils. Vestn Moskovsk Univ. Biol Pochvoved, 4: 91-97. In Russian. English summary. Ivanov, V.V. Same as CRREL 30-2275.

NAL/CAIN

Granik, G.I. et al., 1973:
Problems in the development of industrial centers in the European north of the USSR (Problemy formirovaniia promyshlennykh uzlov Evropeiskogo Severa SSSR). Problemy severa, 1973, Vol. 18, p. 119-130. In Russian. 4 refs. Monokhovich, L.S.

Subarctic soils
Subarctic vegetation

28-3750

Granina, G.T., 1974:
Geobotanical characteristics of the Selenga River delta (K geobotanicheskoi kharakteristike del'ty reki Selengi) Biologicheskii issledovaniia ozer Vostochnoi Sibiri (Biological studies of East Siberian lakes) Listvenichnoe na Baikale, p. 1-5. In Russian.

30-2297

Gribova, S.A. et al., 1970:
Vegetation and soil cover of the Korotaikha River basin (Pochvenno-rastitel'nyi pokrov basseina r. Korotaikhi) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskii osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 119-124. In Russian. 5 refs. Ignatenko, I.V.

USSR-Bol'Shaya Zemlya
Tundra soils
Tundra vegetation
Soil formation
26-1710

Grigor'ev, N.F., 1975:
Basic trends in research and the development and restoring economically developed lands in the Far North. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 15-16.

BROWN

Grishina, L.A., 1974:
Biologic cycle and its role in soil formation (Biologicheskii krugovorot i ego rol' v pochvoobrazovanii) MGU, 128 p. In Russian with English table of contents enclosed. 21 refs.

30-1563

Grishina, L.A., 1972:
Composition and distribution of organic matter in soils of conjugate tundra landscapes (O sobennosti raspredelenia i sostav organicheskogo veshchestva pochv sopriazhennykh tundrovyykh landshaftov) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 75-78. In Russian with English summary. 5 refs. Virchenko, E.P.

30-682

Grishina, L.A., 1970:
Fractional composition of humus in the Taimyr tundra soils. (Fraktsionnyi sostav gumusa poshv Taimyrskoi tundry) Moscow. Universitet. Vestnik. Seriya 6 Biologiya i pochvovedenie May-June 1970 p. 80-85. In Russian. 9 refs. Todotova, N.I.

25-1105

Grishina, L.G., 1972:
Soil mites of the forest steppe and high-mountain tundra of Altai. Akad Nauk Sssr Sbiirsk Otd. Biol. Inst Tr 11: 206-221. In Russian.

NAL/CAIN (Lockheed)

Grishina, L.A. et al., 1972:
Soil organic matter at the Agapa Station research site (West Taimyr). International biological programme, tundra biome; Proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 212-214. 2 refs. Virchenko, E.P.

Tundra soils.
Organic soils.

27-2682

Gritsun, A.T. et al., 1971:
Agrochemical characteristics of soils in the maritime territory (Agrokhimicheskaiia kharakteristika pochv Primorskogo Kraia). Agrokhimicheskaiia kharakteristika pochv SSSR. Dal'nii Vostok. Moscow, Nauka, 1971, p. 31-69. In Russian. 17 refs. Vasicheva, A.D., Aksenov, A.A.

Soil formation
Podsol
Meadow soils
USSR--Primorskiy Krai

26-3817

Gudyna, A.N., 1972:

Ecological groups of plant communities (Ekologicheskiye gruppy rastitel'nykh soobshchestv) In Prirodnyye usloviya osvoeniya tazovskogo neftegazonosnogo rayona: rastitel'nost', yeye resursy i vozmozhnosti osvoeniya (ed. by B.N. Likhanov), p. 151-167. In Russian. Sobolev, L.N.

GeoRef

Gur'ev, T.A. et al., 1971:

Density and moisture content of roadbeds during spring in the European north (O vlazhnosti i plotnosti gruntov zemliannogo polotna v vesennii period na Evropeiskom Severe). Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Izvestiia vysshikh uchebnykh zavedenii. Stroitel'stvo i arkhitektura, 1971, No. 12, p. 149-151. In Russian. 3 refs. Lukina, V.A., Poriadin, B.A., Bolotov, F.F.

Soil moisture migration

26-3849

Gusev, I.I. et al., 1973:

Volume of brushwood and the weight of pine needles in the pine forest of the far north (Ob'em such'ev i ves khvoinoi lapki v el'nikakh Severa). Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Izvestiia vysshikh uchebnykh zavedenii. Lesnoi zhurnal, 1973, No. 3, p. 25-29. In Russian. 6 refs. Sokolov, N. N.

Taiga soils
Taiga vegetation

28-2507

Gvozdetskii, N.A., 1972:

Landscape maps and physiographic subdivision schemes of Transcaucasia (Landshaftnaia karta i skhema fiziko-geograficheskogo raionirovaniia Zakavkaz'ia). Landshaftnoe kartografirovaniie i fiziko-geograficheskoe raionirovaniie gornnykh oblastei (Landscape mapping and physiographic zoning of mountain regions), N.A. Gvozdetskii, ed. MGU, 1972, p. 97-118. In Russian, 39 refs.

Alpine soils.
Alpine vegetation.
Plant ecology.
USSR--Transcaucasia.
28-731

Gvozdetskii, N.A. ed., 1973:

Physiographic zoning of the Tyumen' region (Fiziko-geograficheskoe raionirovaniie Tiimenskoi oblasti). Moscow State University, 1973, 246 p. In Russian with English table of contents enclosed. 156 refs.

Tundra
Taiga
Forest tundra
USSR--Tyumen'

28-2599

Iakovlev, A.S., 1974:

Selection of perennial grasses in Yakutia (Selektsiia mnogoletnikh trav v Iakutii) Biologicheskie problemy Severa, VI simpozium, vypusk 4 (Biological problems of the North, 6th symposium, Vol.4) Yakutsk, Akademiia nauk SSSR, p. 75-79. In Russian.

29-3664

Iakushevskaia, I.V. et al, 1973:

Soils at Tambov station. U.S. Army Cold Regions Research and Engineering Laboratory, July 1973, TL 382, 29 p. AD-764-805. Translation of Pochvy i Produktivnost' Rastitel'nykh Soobshchestv, No. 1, Izdatel'stvo Moskovskogo Universiteta, 1973, p. 150-177, 26 p. Samoilova, E.M., Bugaevskii, V.K.

Meadow soils
Soil moisture
Soil composition

28-3474

Ignatenko, I.V., 1973:

Explanations to the soil map of the tundra station of the botanical institute of the USSR Academy of Sciences (Poiashnitel'nyi tekst k pochvennoi karte tundrovogo statsionara Botanicheskogo instituta im V.L. Komarova AN SSSR). Biogeotsenozy Taimyrskoi tundry i ikh produktivnost'. Vyp. 2 (Biogeocenoses of Taymyr tundra and their productivity. Vol. 2). Leningrad, Nauka, 1973, p. 50-57. In Russian with English summary. 11 refs.

Tundra soils
Cryogenic soils

28-4110

Ignatenko, I.V., 1972:

Micro-complexes in the soil and vegetational cover of east European forest-tundra (Mikrokompleksnost' pochvenno-rastitel'nogo pokrova vostochnoevropeiskoi lesotundry) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 29-41. In Russian with English summary. 26 refs. Norin, B.N.

30-676

Ignatenko, I.V. et al., 1973:

Phytomass reserves in typical plant communities of the "Ary-mas" forests. Ekologiya, 1973 No. 3, p. 36-43. In Russian. Knorre, A.V., Lovelius, N.V., Norin, B.N.

Taiga soils.
Taiga vegetation.
Biomass.

28-416

Ignatenko, I.V., 1974:

Regional peculiarities of typical tundra soils (O provintsial'nykh osobennostiakh pochv tipichnoi tundry) *Biologicheskie problemy Severa*, VI simpozium; Vypusk 6 (Biological Problems of the North, 6th symposium, Vol.6) Yakutsk, Akademiia nauk SSSR, p. 13-21. In Russian.

29-1064

Ignatenko, I.V. et al., 1971:

Soils and total phytomass of the dwarf shrub-dryadaceae and willow-stand tundras in the east European north (Pochvy i obshchie zapasy fitomassy v ernichkovo-driadovoi i ivniakovoi tundrach vostochnoevropetskogo severa). *Ekologiya*, 1971, No. 4, p. 17-24. In Russian. 10 refs. Khakimzianova, F.I.

Tundra soils
Tundra vegetation
Tundra terrain

26-1797

Ignatenko, I.V. et al., 1971:

Soils and total phytomass reserves in dwarf Birch-White Dryas and Willow tundras of the East European northlands. *Soviet journal of ecology*, July-Aug. 1971 (publ. March 1972) 2(4), p. 300-305. Translated from *Ekologiya*. For Russian original see 26-1797. 10 refs. Khakimzianova, F.I.

Tundra soils.
Tundra vegetation.

28-346

Ignatenko, I.V., 1970:

Soils in mottled tundras of the east-European north (O pochvakh piatnistykh tundr vostochnoevropetskogo Severa). *Geograficheskoe obshchestvo SSSR. Doklady otdelenii i komissii*, 1970, Vol. 13, p. 88-106. In Russian. 32 refs.

Tundra soils.
Soil profiles.
Soil formation.

28-602

Ignatenko, I.V. et al., 1970:

Forest tundra.
Tundra soils.
Tundra vegetation.

26-1708

Ignatenko, I.V., 1972:

Soils of ARY-MAS forest-island. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 150-155. 8 refs.

Tundra soils.
USSR--ARY-MAS.

27-2671

Ignatenko, I.V., 1971:

Soils of basic types of tundra biogeocenoses in the Botanical Institute Research Station, West Taymyr (Pochvy osnovnykh tipov tundrovnykh biogeotsenozov Zapadnogo Taimyra (na primere stacionara Botanicheskogo instituta AN SSSR. Biogeotsenozы Taimyrskoi tundry i ikh produktivnost' (Biogeocenoses of Taymyr tundra and their productivity) Leningrad, Nauka, p. 57-107. In Russian with English summary. 27 refs.

27-1543

Ignatenko, I.V., 1972:

Soils of the east-European forest tundra and their zonal position. *Pochvovedenie*, 9: 5-18. In Russian. English summary.

NAL/CAIN

Ignatenko, I.V., 1972:

Soils of the East European forest tundra and their zonal position. *Soviet soil science*, Sept.-Oct., 1972, No. 5, p. 513-526. Translated from *Pochvovedenie*. 41 refs.

Forest tundra.
Tundra soils.
Soil profiles.

28-1305

Ignatenko, I.V., 1973:

Soils of the main types of tundra biocoenoses in western Taymyr. U.S. Army Cold Regions Research and Engineering Laboratory, Aug. 1973, TL 408, 67 p. AD-769 717. For Russian original see 27-1543. 27 refs.

Soil patterns
Tundra soils
Patterned ground

28-2866

Ignatenko, I.V., 1971:
Soils of the river Kara basin and their zonal classification. *Pochvovedenie*, 2: 3-16. In Russian. English summary.

NAL/CAIN

Ignatenko, I.V. et al., 1972:
Standing crop in plant communities at the station ARY-MAS. International biological programme tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 140-149. Knorre, A.V. Lovelius, N.V. Norin, B.N.

Tundra vegetation.
USSR-ARY-MAS.

27-2670

Ignatenko, I.V. et al., 1970:
Zonal characteristics of "spotty" tundras in the northeastern part of European U.S.S.R. (O zonal'nykh osobennostiakh piatnistykh tundr severo-vostoka evropeiskoi chasti SSSR) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biogocial basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 106-113 In Russian. 24 refs. Norin, B.N.; Druzina, V.D.

Ignat'eva, L.A., 1974:
Biomass of the grass stratum of spruce-cedar-fir and birch forests in the southern taiga of western Siberia (Uchet massy travianogo iarusy elovo-kedrovo-pikhtovogo i berezovogo lesa v zone iuzhnoi taigi Zapadnoi Sibiri) Akademiia nauk SSSR. Sibirskoe otdelenie. *Izvestiia. Seriya biologicheskikh nauk* Dec. 1974 3(15) p. 44-51.

30-148

Ignat'eva, L. A., 1973:
Determining the abundance of grass cover types in forests of the Ob' River valley (Opredelenie obil'ia vidov travianogo pokrova Priob'skikh lesov). *Rastitel'nost' Priob'ia i ee khoziaistvennoe ispol'zovanie lesostepnykh raionov Priob'ia*. Novosibirsk, Nauka, 1973, p. 176-190. In Russian. 13 refs.

Vegetation patterns
Forest ecosystems

28-1933

Ignat'eva, L.A., 1974:
Phenological development of plants in the grass-shrub layer of southern taiga in west Siberia (Fenologicheskoe razvitie rastenii traviano-kustarnichkovogo iarusy nekotorykh fitotsenozov iuzhnoi taigi Zapadnoi Sibiri) *Lesovedenie* May-June 1974 No. 3 p. 64-73. In Russian with English summary. 10 refs.

29-1611

Ignat'eva, L.A., 1973:
Phytomass of the small shrub - grass layer in two forest coenoses of the southern taiga in western Siberia (Kharakteristika fitomassy kustarnichkovotravianogo iarusy dvukh lesnykh tsenozov iuzhnoi taigi Zapadnoi Sibiri). *Botanicheskii zhurnal*, May 1973, 58(5), p. 671-675. In Russian. 9 refs.

Taiga vegetation.
Plant ecology.
Taiga soils.

28-323

International Geographical Congress, XXIII. Symposium: Geography of Polar Countries. Tour K-29, Leningrad, July 22-26, 1976. Extended summaries. Leningrad, Hydro-meteorological Publishing House, 1975.

BROWN

-- 1971:
International Tundra Biome.

Biogeocoenoses of the Tundra. Akademiia nauk SSSR. Translation March 1971 No. 1 4p. Translated from Russian. 9 refs.

Tundra vegetation.
Ecology.

26-656

Iurtsev, B.A., 1975:
An analysis of the flora of the Ola Plateau (in connection with the history of the plant cover of the Kolyma Mountains) *Biull Moskovsk o va ispyt prir, Otd Biol*, 80(2): 120-133. In Russian. English summary. Khokhriakov, A.P.

NAL/CAIN

Iurtsev, B.A., 1970:

Botanical and geographic investigations in Chukotka (Botaniko-geograficheskie issledovaniia na Chukotke) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knozhnoe izd-vo, 1970 p. 52-59. In Russian. 19 refs.

Tundra soils.
Tundra vegetation.

2

Iurtsev, B.A., 1970:

Plant Ecology.
USSR-Chukotskiy Poluostrov.

26-1699

Iurtsev, B.A. et al., 1971:

Cytotaxonomical characteristics of endemic plants of the mountainous northeast of Asia. Tsitotaksonomicheskaia kharakteristika endemichnykh rastenii gornogo severo-vostoka Azii. *Botanicheskii zhurnal*, Jan. 1971, 57(1), p. 50-63. In Russian with English summary 31 refs. Zhukova, P.G.

Mountain soils.
Alpine vegetation.
Plant ecology.
USSR--Verkhoyansk.
USSR--Kolyma

27-19

Iurtsev, B.A., 1973:

Floristic discoveries of the Chukchi tundra, I. *Nov Sist Nizshikh Rast*, 10: 283-324. In Russian. Galanin, A.V.; Petrovskii, V.V.; Plieva, T.V.; Razzhivin, V.IU.

NAL/CAIN

Iurtsev, B.A. et al., 1972:

Interesting floristic finds in easternmost Chukotka Peninsula, Pt. 1 (Interesnye floristicheskie nakhodki na vostoke Chukotskogo poluostrova). *Botanicheskii zhurnal*, July 1972, 57(7), p. 765-778. In Russian with English summary. 16 refs. Kozhevnikov, I.U.P., Nechaev, A.A.

Arctic vegetation
Plant ecology
Arctic soils

28-2233

Iurtsev, B. A. et al., 1973:

Interesting floristic finds in the easternmost Chukotka Peninsula, Pt. 2 (Interesnye floristicheskie nakhodki na vostoke Chukotskogo poluostrova, II). *Botanicheskii zhurnal*, Dec. 1973, 58(12), p. 1742-1753. In Russian with English summary. 6 refs. Sytin, A. K., Sekretareva, N. A.

Arctic vegetation
Plant ecology
Arctic soils

28-2234

Iurtsev, B.A., 1975:

Floristic finds on the eastern Chukchi peninsula, pt 3 (Interesnye floristicheskie nakhodki na vostoke Chukotskogo poluostrova. III) *Botanicheskii zhurnal* Feb. 1975 60(2) p. 233-247. In Russian. 20 refs. Zhukova, P.G.; Plieva, T.V.; Razzhivin, V.IU.; Sekretareva, N.A.

30-1950

Iurtsev, B.A., 1975:

New findings for the flora of the Chukot tundra. 2. *Nov Sist Vyssh Rast Akad Nauk SSSR*, 12: 301-335. In Russian. Galanin, A.V.; Derviz-Sokolova, T.G.; Koroleva, T.M.; Petrovskii, V.V.; Plieva, T.V.; Razzhivin, V.IU.; et al

NAL/CAIN

Iurtsev, B. A., 1973:

Phytogeographic zonality and floristic subdivisions of the Chukotka tundra. *Botanicheskii zhurnal*, 1973, 58(7), p. 945-965. In Russian with English summary. 38 refs.

Arctic vegetation
Tundra vegetation
Plant ecology

28-1678

Iurtsev, B.A., 1975:

Sectoral differentiation of the Arctic flora (AF). XXIII International Geographical Congress. Symposium: Geography of Polar Countries. Tour K-29. Leningrad, Hydro-meteorological Publishing House, 1975. p. 79-81.

BROWN

Iurtsev, B.A., 1974:

Steppe communities of Chukotka tundra and the Pleistocene "tundra-steppe" (Stepnye soobshchestva chukotskoi tundry i pleistotsenovaia "tundrostep") Botanicheskii zhurnal 1974 59(4) p.484-501. In Russian with English summary. 21 refs.

29-500

Ivanov, B.I., 1974:

Problems of introducing plants into central Yakutia (Voprosy introduktsii rastenii v tsentral'noi IAKutii) Biologicheskie problemy Severa, VI simpozium, Vypusk 7 (Biological problems of the North, 6th symposium, Vol. 7) Yakutsk, Akademiia nauk SSSR, p. 57-63. Dokhunaev, V.N.

29-3679

Ivanov, G.I., 1971:

Soils in the Amur region and maritime territory (Pochvy Primor'ia i Priamur'ia). Agrokhimicheskaiia kharakteristika pochv SSSR. Dal'nii Vostok. Moscow, Nauka, 1971, p. 7-30. In Russian. 26 refs.

Soil formation

Podsol

Forest soils

Meadow soils

USSR-Amur River

USSR--Primorskiy Kray

26-3816

Ivanov, V.V., 1972:

Composition of the soil solution in the West Taimyr tundra soils. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee. April 1972. p. 233-235.

Tundra soils.

Soil composition.

27-2686

Ivanov, V.V., 1970:

On the characteristic of the gleization process in the tundra soils (West Taimyr). (USSR) Moscow Univ Vestnik Ser 6 Biol Pochvoved, 6: 72-77. In Russian. Bogatyrev, L.G. (Same as CRREL 25-3487)

NAL/CAIN

Ivanov, V.V., 1970:

On the composition of soil solutions in tundra soils of western Taimyr. Moscow Univ Vestnik Ser 6 Biol Pochvoved, 3: 86-91. In Russian. (Same as CRREL 25-1106)

NAL/CAIN

Ivanova, E.N. et al., 1970:

Basic sub-types of tundra gley soils in the U.S.S.R. (Osnovnye podtipy tundrovyykh gleevykh pochv SSSR) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 94-99. In Russian. 22 refs. Zaboeva, I.V. Karavaeva, N.A. Targul'ian, V.O.

Cryogenic soils.

Arctic soils.

Tundra soils.

26-1706

Ivanova, E.N., 1974:

Soil map of the arctic. Trans Int Congr Soil Sci, 10th (v. 8): 44-50. In Russian. English summary. Vasil'evskaia, V.D.; Ignatenko, I.V.; Karavaeva, N.A.; Liverovskaia, I.T.; Mikhailov, I.S.; Targul'ian, V.O.; Fridland, V.M.; Naumov, E.M.

NAL/CAIN

Ivanova, E.N., 1971:

Soils of central Yakutia. Pochvovedenie, 9: 3-17. In Russian. English summary.

NAL/CAIN

Ivanova, T.F., 1970:

Effect of frozen rocks on vegetation in Bol'shezemel'skaya tundra (Vliianie merzlykh porod na rastitel'nost' na primere Bol'shezemel'skoi tundry). Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North). Syktyvkar, Komi knizhnoe izd-vo, 1970, p. 195-199. In Russian. 10 refs.

Ivanova, T.F., 1970

Tundra soils

Tundra vegetation

Active layer

26-1724

Ivashchenko, A.A., 1973:

Effect of spring and summer frost on vegetation in western Tien Shan (Ovlivanií vesenne-letnikh zamorozkov na rastitel'nost' zapadnogo Tian'-Shania). *Ekologiya*, Nov.-Dec. 1973, No. 6, p. 83-85. In Russian. 3 refs.

Alpine soils
Alpine vegetation

28-3059

Ivlev, A.M., 1971:

Agrochemical characteristics of the Sakhalin region soils (Agrokhimicheskaya kharakteristika pochv Sakhalinskoí oblasti). *Agrokhimicheskaya kharakteristika pochv SSSR. Dal'nii Vostok*. Moscow, Nauka, 1971, p. 313-331. In Russian. 11 refs.

Mountain soils
Forest soils
Podsol
USSR--Sakhalin Island
USSR--Kuril Islands

26-3823

Ivlev, A.M., 1972:

Role of cryogenic factors in soil formation in the Far East. (Rol' kriogennykh faktorov v pochvoobrazovanii na Dal'nem Vostoke) *Vsesoiuznyi simpozium po biologicheskim problemam Severa*, 5th, Magadan, Apr. 18-22, 1972. *Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR)* p. 24-28. In Russian with English summary. 3 refs.

30-675

Ivlev, A.M. et al., 1973:

Soil classification and soil formation processes in the Amur River flood-plain within the limits of the Udyl'-Kazinskiy plain (Protsessy pochvoobrazovaniia i klassifikatsii pochv poímy Amura v predelakh Udyl'-Kizinskií nizmennosti). *Prirodnye osobennosti bolot Priamur'ia (Natural characteristics of swamps in the Amur River area)*. Novosibirsk, Nauka, 1973, p. 78-89. In Russian. 25 refs. Ershov, I.U.I.

Ivlev, A.M. et al., 1973

Peat
Soil formation
Soil profiles

28-3484

Izmailova, N.N., 1974:

Water loss to transpiration in plant communities of the eastern Pamirs (Raskhod vody na transpiratsiiu rastitel'nykh soobshchestvami Vostochnogo Pamira). *Ekologiya*, Jan.-Feb., 1974, No. 1, p. 95-97. In Russian. 9 refs.

Alpine vegetation
Mountain soils
Soil moisture migration

28-3800

Kagan, A.A. et al., 1971:

Morainial deposits of the northwestern USSR (engineering-geological characteristics) (Morennye otlozheniia Severo-Zapada SSSR (inzhenerno-geologicheskaya kharakteristika)). Moscow, Nedra, 1971, 137 p. In Russian. 137 refs. Solodukhim, M.A.

Soil composition.

28-1279

Kaganovskaia, S.E., 1976:

Environmental protection problems related to the construction of embankments and porous fills on permafrost. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. *CRREL TL 518*, p. 47-49.

BROWN

Kalinin, A.M., 1973:

Forest vegetation and forestry zonation of the Kemerovo Oblast. *Izv. Sib Otd Akad Nauk SSSR Ser Biol Nauk* (3): 3-9. In Russian?

Biol. Abst. Inc.

Kalmykov, G.S., 1971:

Variations in the fertility of dried peat bog soils in the northwestern RSFSR after cultivation. *Izmenenie plodorodiia osushennykh torfiano-bolotnykh pochv severo-zapadnoi zony RSFSR pri ikh osvchenii. Agrokhiimiia*, July 1971, No. 7, p. 104-110. In Russian. 10 refs.

Peat.
Soil composition.
Soil formation.

27-131

Kamenetskaia, I.V., 1973:

Changes in the mass and morphology of needles of various ages in the crowns of the common pine (*Pinus silvestris* L.) by year in various types of forests. Produktivnost' i struktura rastitel'nosti molodykh sosniakov (Productivity and structure of the vegetation in young pine forests). *Moscos, Nauka* 1973, p. 63-86. In Russian. Refs. p. 84-86.

Vegetation factors
Taiga vegetation

28-2151

Kamenetskaia, I.V. et al., 1973:

Productivity of the vegetative cover in certain types of young pine forests of homogeneous age in the southern taiga (Produktivnost' rastitel'nogo pokrova v nekotorykh tipakh molodykh odnovozrastnykh sosniakov iuzhnoi taigi). Produktivnost' i struktura rastitel'nosti molodykh sosniakov (Productivity and structure of vegetation in young pine forests). *Moscow, Nauka*, 1973. In Russian. Refs. p. 58-62. Zvorykina, K. V., Malysheva, T. V.

Taiga vegetation
Vegetation patterns

28-2150

Kapranov, V.E. et al., 1973:

Lateral heat diffusion in porous, water-saturated ground (Issledovanie poperechnogo rasseianiia tepla v vodonasyshchennykh fil'truushchikh gruntakh) International Conference on Permafrost, 2nd, Yakutsk, 1973 1973 Vol. 1, p. 64-68. In Russian. 4 refs. Perl'shtein, G.Z.

Soil moisture migration.

28-1022

Karagodina, E.M., 1973:

Short-lived cryogenic formations on the surface and in the upper zones of soils and ground (Osobennosti kratkovremennykh kriogenykh obrazovaniï v verkhnikh gorizontakh i na poverkhnosti pochvogruntov) *Moscos. Universitet. Vestnik. Seria 5 Geografiia* Nov.-Dec. 1973, No. 6, p. 71-75. In Russian with English summary. 8 refs.

Active layer
Vegetation factors
Tundra soils

28-2848

Karavaev, M.N. et al., 1971:

Aveneae Steppes of the far northeastern Siberia with *Helictotrichon krylovii* (Pavl.) Henrard (Ovsetsovyie stepi s *Helictotrichon krylovii* (Pavl.) Henrard na Krainem severo-vostoke Sibiri). *Botanicheskii zhurnal*, Oct. 1971, 56(10), p. 1436-1443. In Russian with English summary. 8 refs. Skriabin, S.Z.

Arctic soils
Arctic vegetation
Plant ecology

26-2533

Karavaeva, N.A., 1973:

Acid illuvial-gley soils of west Siberian middle and northern taiga. *Pochovedenie*, 3: 3-18. In Russian.

NAL/CAIN

Karavaeva, N.A. et al., 1970:

Cryogenic soils and their characteristics (K voprosu o merzlotnykh pochvakh i merzlotnykh pochvennykh priznakakh) *Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa* (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 99-106. In Russian. 2 refs. Targul'ian, V.O.

Cryogenic soils.
Soil moisture migration.
Tundra soils.

26-1707

Karavaeva, N.A., 1974:

Major kinds of gley soils of the tundra and northern taiga regions in the Soviet Union. In *Soil Science in the U.S.S.R. Geoderma*, vol. 12, no. 1-2, p. 91-99. In English.

GeoRef

Karavaeva, N.A., 1974:

The role of gleyzation in the profile differentiation of taiga soils in western Siberia. *Trans Int Congr Soil Sci*, 10th (v. 6, pt. 1): 180-187. In Russian. English summary.

NAL/CAIN

Karavaeva, N. A., 1973:

Taiga soils of Western Siberia. *Moscow, Nauka*, 1973, 167 p. In Russian with English table of contents enclosed. 44 refs.

Taiga soils
Soil composition
Soil formation

28-1937

Karol', B.P., 1970:

Heat balance of the Pamirs-Alai alpine meadows. (Teplovoi balans vysokogornyykh pastbishch. Leningrad. Universitet. Uchenye zapiski. 1970. 20(342). p. 91-112. In Russian. 14 refs.

Alpine soils.
Alpine Vegetation.
USSR-Pamirs.
USSR-Alayskiy Khrebet.

26-218

Katanskaia, V.M., 1970:

Higher aquatic plants in the lakes of Bol'shezemel'skaya tundra (Vysshiaia vodnaia rastitel'nost ozer Bol'shezemel'skoi tundry). Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North). Syktyvkar, Komi knizhnoe izd-vo, 1970, p. 265-270. In Russian. 3 refs.

Kazakov, K.IA., 1973

Taiga terrain. Geobotanical interpretation.

28-1473

Kazanskii, V.D., 1972:

Increasing the reliability of snow-protection vegetation. Povyshat' nadezhnost' snegozashchitnykh posadok. Avtomobil'nye dorogi, Feb. 1972, No. 2, p. 18-20. In Russian.

Protective vegetation.

27-76

Kazantseva, L.K., 1974:

Ascomycetes as components of some vegetational communities in polar Urals (Sumchatye griby kak komponenty nekotorykh rastitel'nykh soobschestv Poliar-nogo Urala) Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1974 Vol. 88 p. 95-105. In Russian. Refs. p. 104-105. Sirko, A.V.

30-448

Kazantseva, L.K., 1971:

The role of fungi in the decomposition of the wood of larix sibirica in the polar Urals. (USSR) Ekologiya, 2: 96-98. In Russian.

NAL/CAIN

Kazantseva, L.K., 1971:

Role of fungi in the decomposition of Siberian larch wood in the arctic Urals. Ecology (N Y), 2(2): 170-172. In English. Translated from Ekologiya 2(2): 96-98.

NAL/CAIN

Kazantseva, L.K., 1972:

Role of fungi in wood decomposition and in abscission in forest tundra. Mikol Fitol, 6(2): 111-116. In Russian.

NAL/CAIN

Khailov, S. Kh., 1974:

The organic matter of the eastern Pamir alpine desert soils. Problemy Osvoeniia Pustyn', 3: 13-20. In Russian. English summary.

NAL/CAIN

2

Katanskaia, V.M., 1970

Plant ecology
Tundra soils
Tundra vegetation
USSR--Bol'shaya Zemlya

26-1730

Katenin, A.E., 1974:

Geobotanical explorations on Chukotka Part 1 Vegetation of the middle reaches of the River Amguema USSR. Bot Zh (Leningr) 59 (11): 1583-1595. In Russian.

Biol. Abst. Inc.

Katrich, V.N., 1975:

Soil formation in swampy peat and in cryogenic-gley soils of the Okhotsk zone of the Magadan area (Osobennosti pochvoobrazovaniia v torfiano-bolotnykh merzlotno-gleevykh pochvakh priokhotskoi zony Magadanskoi oblasti) Vsesoiuznaia konferentsiia Pochvennyi kriogenez i melioratsiia merzlotnykh i kholodnykh pochv Pushchino, Oct., 1975, Materialy Moscow, Nauka, p. 74-78. In Russian. 9 refs.

30-4233

Kats, N.IA., 1971:

Swamps of the earth (Bolota zemnogo shara). Moscow, Nauka, 1971, 295 p. In Russian with English table of contents. 1272 refs. No microfiche available.

Tundra soils
Tundra vegetation
Soil moisture migration

26-3333

Kazakov, K.IA., 1973:

Engineering-geological mapping (scale 1:50,000-1:25,000) of the northwestern part of the European USSR, based on aerial photography (Metodika inzhenerno-geologicheskogo kartirovaniia v masshtabakh 1:50,000 - 1:25,000 na osnove materialov aerofotos'emki v usloviakh severo-zapada evropeiskoi chasti SSSR). Aerofotos'emka - metod izucheniia prirodnoi sredy (Aerial photography as a method of studying natural environments). Leningrad, Nauka, 1973, p. 123-130. In Russian. 6 refs.

Khantimer, I.S., 1974:

Agricultural development of tundra regions (Sel'skokhoziaistvennoe osvoenie tundry). Leningrad, Nauka, 1974, 226 p. In Russian with English summary and table of contents enclosed. Refs. p. 211-221.

Tundra soils
Tundra vegetation

28-4032

Khantimer, I.S., 1970:

Producing forage crops by establishing grassland in tundra (Proizvodstvo korma v tundre putem ee zaluzheniia) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 29-34. In Russian. 2 refs.

Tundra soils.
Tundra vegetation.
Meadow soils.

26-1695

Khantimer, I.S., 1974:

Protection of natural environments in the tundra. U.S. Army Cold Regions Research and Engineering Laboratory TL 456. 4 p. ADA-003 218 Translation of Agricultural development of tundra regions, Leningrad, Nauka, Chapter 7, p. 205-2-7.

29-2711

Khantulev, A.A., 1973:

Land (soil) resources of the northwest of the RSFSR and their potential use. Izv Akad Nauk. Ser Geogr, 4: 43-51. In Russian.

NAL/CAIN

Khantulev, A.A. et al., 1972:

Origin of soils in the northwestern R.S.P.S.R. (the Leningrad, Pskov, and Novgorod regions). Voprosy genezisa pochv severo-zapada RSFSR (Leningradskaya, Pskovskaya, Novgorodskaya oblasti. Leningrad. Universitet. Vestnik, May 1972, 9(2), p. 121-127. In Russian with English summary. 38 refs. Gagarina, E.I., Matinian, N.N., Schastuaia, L.S.

Soils.
Soil formation.
Soil profiles.
USSR--Leningrad.
USSR--Novgorod.

27-450

Khantulev, A.A., 1971:

Soil cover structure of the east-Baraba undulating plain. (USSR) Leningr Univ Vestnik Ser Biol, 9(2): 100-107. In Russian. Kerzum, P.P.; Shvedchikov, G.V.; Balashov, A.G.

NAL/CAIN

Khantulev, A.A., 1971:

Soil structure and some reclamation of land properties of soils of the On-Chanov lowlands. Leningr Univ Vestnik Ser Biol, 21(4): 125-133. In Russian. English summary. Kerzum, P.P.; Bogdanov, I.E.; Balashov, A.G.; Shvedchikov, G.V.

NAL/CAIN

Khismatullin, Sh.D., 1970:

Moisture regime of the dark coniferous forest soils in the lower Angara River area. Osnovnye cherty rezhima vlazhnosti pochv temnokhvoinykh lesov nizhnego Priangar'ia. Akademiia nauk SSSR. Sibirskoe otdelenie. Institut geografii Sibiri i Dal'nego Vostoka. Doklady 1970 Vol. 27, p. 66-75. In Russian. 13 refs.

Taiga.
Soil moisture.
Soil temperature.

27-1787

Khismatullin, Sh.D., 1970:

Soils of the Angara-Biryusinsk inter-fluve. Pochvovedenie, 2: 30-43. In Russian.

NAL/CAIN

Khlebodarov, V.N., 1975:

Growth of self-sown pine in felled areas along the Angara River (Samosev sosny na vyrubkakh Priangar'ia) Lesnoe khoziaistvo Feb. 1975 No.2 p. 30-31. In Russian. 2 refs.

30-2815

Khlonov, I.U.P., 1973:

Dendrological zoning of the Kuznetsko-Salair alpine region. Tr Biol Inst. Akad Nauk SSSR Sibirsk Otd, 20: 208-217. In Russian.

NAL/CAIN

Khlonov, I.U.P.

Forest tree regional distribution of the Kuznetsk-Salair alpine region. Tr Biol Inst. Akad Nauk SSSR Sibirsk Otd, 20: 208-217. In Russian.

NAL/CAIN

Khlonov, I.U.P. et al., 1971:

Pine trees of Kemerovo region and certain methods of raising productivity (Sosnovye lesa Kemerovskoi oblasti i nekotorye puti povysheniia ikh produktivnosti). Akademiia nauk SSSR. Sibirskoe otdelenie. Biologicheskii institut. Trudy po lesnomu khozhiaistvu Zapadnoi Sibiri, 1971, Vol. 9, p. 41-57. In Russian. 5 refs. Trofimov, S.S. SD95.A6

Taiga soils.
Taiga vegetation.
Plant ecology.

28-117

Khlynovskaia, N.I., 1971:

Bioclimatic zonation of the northeastern U.S.S.R. (Bioklimaticheskoe raionirovanie territorii severo-vostoka SSSR). Akademiia nauk SSSR. Dal'nevostochnyi tsentr. Severo-vostochnyi kompleksnyi institut. Trudy, 1971, Vol. 42, p. 226-235. In Russian. 22 refs.

Arctic soils
Arctic vegetation
Plant ecology

26-1848

Khmelev, V.A., 1972:

On features of the alpine-tundra soils of the central Altai. In Genericheskie Osobennosti i Voprosy Plodorodiia Pochv Zapadnoi Sibiri p. 13-25. In Russian.

NAL/CAIN

(Lockheed)

Khodachek, E.A., 1973:

Biology of flowering and fruiting of west Taymyr plants (K biologii tsvetenii i plodono-sheniia rastenii Zapadnogo Taymyra). Biogeotsenozy Taymyrskoi tundry i ikh produktivnost'. Vvp. 2 (Biogeocenoses of Taymyr tundra and their productivity. Vol. 2). Leningrad, Nauka, 1973, p. 83-106. In Russian with English summary. 53 refs.

Bibliographies
Tundra vegetation
Plant ecology
USSR--Taymyr Peninsula

28-4113

Khodachek, E.A., 1971:

Vegetal matter of tundra phytocoenoses in the western part of Taymyr Peninsula. International Tundra Biome Translation Dec. 1971 No. 5. 12 p. Translated from Bot. Zhurnal, 54(7): 1059-1073, 1969.

Tundra vegetation

BROWN

Khokhriakov, A.P., 1971:

Flora in the northern part of the Morsk region, Yakutia (K flore severnoi chasti Morskogo raiona Iakutskoi ASSR). Akademiia nauk SSSR. Dal'nevostochnyi tsentr. Severo-vostochnyi kompleksnyi institut. Trudy, 1971, Vol. 42, p. 177-187. In Russian.

Plant ecology
Arctic soils
USSR--Yakutia

26-1844

Khokhriakov, A.P., 1974:

Flora of the Olsk basalt plateau (Kolyma-Okhotsk watershed) Biull Moskovsk O Va Ispyt Prir, Otd Biol, 79 (2): 59-70. In Russian. English summary. Iurtsev, B.A.

NAL/CAIN

Khokhriakov, A.P., 1973:

Flora of the southern part of the Magadan region. Biull GI Bot Sada, 88: 43-48. In Russian.

NAL/CAIN

Khokhriakov, A.P., 1973:

Rare plant species from the southern part of the Magadan region (Redkie vidy rastenii iz iuzhnoi chasti magadanskoi oblasti). Botanicheskii zhurnal, Dec. 1973, 58(12). In Russian. 5 refs.

Arctic vegetation
Plant ecology

28-2236

Khokhriakov, A.P., 1971:

Relationship between the floras of northeastern Siberia and the Caucasus (O sviazi flor severo-vostochnoi Sibiri i Kavkaza). Akademiia nauk SSSR. Dal'nevostochnyi tsentr. Severo-vostochnyi kompleksnyi institut. Trudy, 1971, Vol. 42, p. 174-176. In Russian. 1 ref.

Alpine vegetation
Plant ecology
Alpine soils

26-1843

Khokhriakov, A.P., 1972:

Steppe flora in the upper Kolyma River basin (O stepnoi flore v basseine verkhnei Kolymy) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 136-140. In Russian with English summary. 8 refs. Shatkauskas, A.V.

30-691

Khokhriakov, A.P., 1972:

Trends in growth forms of plants under extreme conditions (Napravleniia evoliutsii form rosta rastenii v ekstremal'nykh usloviakh) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 225-232. In Russian with English summary. 24 refs.

30-698

Khokhriakov, A.P., 1973:

Vegetation in the southern part of the Magadan area (K flore iuzhnoi chasti Magadanskoi oblasti) Moscow. Glavnyi botanicheskii sad. Biulleten' 1973 Vol. 88 p. 43-48. In Russian. 14 refs.

29-742

Khramov, A.A., 1971:

Classification of swamp vegetation in the south taiga of the Krasnoyarsk region (Klassifikatsiia bolotnoi rastitel'nosti iuzhnoi taigi Krasnoyarskogo kraia). Rastitel'nost' pravoberezh'ia Eniseia (Vegetation of the right bank of the Yenisey river). Novosibirsk, Nauka, 1971, p. 327-336. In Russian. 40 refs.

Taiga soils
Taiga vegetation
Plant ecology

26-3215

Khramova, N.F., 1974:

Seed productivity and phytomass of *pinus sibirica*. In *Biologiya Semennogo Razmnozheniia Khvoynykh Zapadnoi Sibiri*, p. 95-105. In Russian. Khramov, A.A.

NAL/CAIN

Khrenova, G.S., 1972:

Microbiological characteristics of certain types of swamp forests of the Tavda region west of the Urals (Mikrobiologicheskoi kharakteristike nekotorykh tipov volotnykh lesov Tavdinskogo Zaural'ia). Akademiia nauk SSSR. Ural'skii nauchnyi tsentr. Institut ekologii rastenii i zhivotnykh. Trudy, 1972, Vol. 83, p. 164-181. In Russian. 21 refs.

Taiga vegetation
Peat
Taiga soils
USSR--Tavda

28-2669

Khrenova, G.S., 1971:

Microflora of soils of southern taiga spruce forests of the Tavda-Kuminskii interfluvial region. (USSR) *Ekologiya*, 1: 36-44. In Russian.

NAL/CAIN

Khrenova, G.S., 1970:

Zymotic activity of some mountain-forest soils in northern Urals (Fermentativnaia aktivnost' nekotorykh gorno-lesnykh pochv Severnogo Urala). Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy, 1970, Vol. 76, p. 50-57. In Russian. 20 refs.

Mountain soils
Forest soils
Soil formation
USSR--Ural Mountains

26-1868

Khrustalev, L.N. et al., 1973:

Variations in the components of external heat-mass transfer between earth surface and atmosphere, and of the meteorological regime of a built-up territory in the Far North (Izmenenie sostavliaiushchikh vneshnego teplomassoobmena zemnoi poverkhnosti s atmosferoi i meteorologicheskogo rezhima zastroennoi territorii v usloviakh Krainego Severa) International Conference on Permafrost, 2nd, Yakutsk 1973, Vol. 1, p. 91-94. In Russian. Gorbacheva, V.M.

Khristalev, L.N. et al.

Active layer.
Soil temperature.
Tundra vegetation.

28-1028

Khudiakov, O.I., 1971:

Cryogenic soils of the Magadan swamps and their agricultural utilization (Bolotnye merzlotnye pochvy Magadanskoj oblasti i ikh sel'skokhoziaistvennoe ispol'zovanie) Moscow. Universitet. Vestnik. Seria 6. Biologiya i pochvovedenie. March-April 1971. No. 2. p. 87-91. In Russian. e refs.

Cryogenic soils.
USSR-Magadan.

26-134

Khutortsev, I.I., 1973:

Erosion control significance of fagus and abies forests in reddish-brown alpine forest soils in the Kuban basin. In Problemy Lesnogo Pochvovedeniia, p. 221-224. In Russian.

NAL/CAIN

Kinosita, S., 1973:

Soil water migration during frost heave (Migratsiia vody v grunte pri puchenii). International Conference on Permafrost, 2nd, Yakutsk, 1973, 1973 Vol. 1, p. 68-72. In Russian. 2 refs.

Soil moisture migration.

28-1023

Kishchinskii, A.A. et al., 1973:

Preservation of natural environments in the north is an international problem (Okhrana prirody Severa--mezhdunarodnaia problema). Problemy severa, 1973, Vol. 18, p. 19-31. In Russian. 19 refs. Riabova, L.M.

Arctic vegetation
Plant ecology
Arctic soils

28-3741

Kmitovenko, A.T. et al., 1973:

Analyzing the effect of basic factors on the freezing of peat deposits and calculating frost penetration depths (Analiz vlianiia osnovnykh faktorov na promerzanie razrabatyvaemoi torfianoi zalezhi i raschet glubiny promerzaniia). Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Izvestiia vysshikh uchebnykh zavedenii. Gornyi zhurnal, 1973, No. 5, p. 22-27. In Russian. 3 refs. Aleksandrov, B.M., Gatitskii, N.V., Tiabotov, I.A.

2

Kmitovenko, A.T. et al., 1973

Peat
Soil moisture migration

28-2616

Kolesnikov, B.P., 1972:

Biologic recultivation of economically developed lands in the Arctic and Subarctic regions (Biologicheskaia rekul'tivatsiia tekhnogennykh landshaftov Arktiki i Subarktiki). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 50-51. In Russian.

Arctic soils.
Arctic vegetation.
Ecosystems

28-1253

Kolesnikov, B.P., 1972:

Forest vegetation in the central part of the Tavda-Kuma interfluvium (Lesorastitel'nye usloviia srednei chasti basseina r. Tavdy i Tavda-Kuminskogo mezhdurech'ia). Akademiia nauk SSSR. Ural'skii nauchnyi tsentr. Institut ekologii rastenii i zhivotnykh. Trudy, 1972, Vol. 83, p. 7-26. In Russian. 62 refs.

Taiga vegetation
Forest ecosystems
USSR-Tavda

28-2664

Kolesnikov, B.P., 1975:

Problems of land recultivation. Priroda (Mosk), 5: 60-69. In Russian. Motorina, L.V.

NAL/CAIN

Kolesnikov, B.P., 1970:

Some results of studies of phyto-reclamation of industrial dumps (Laboratory of Industrial Botany of the Ural University) In Rekul'tivatsiia v Sibiri i na Urale, p. 89-98. In Russian. Pikelova, G.M.

NAL/CAIN

Kolesnikov, B.P., 1972:

Southern taiga forest types of the middle reaches of the Tavda River and Tavda-Kuma interfluvium (Tipy iuzhnotaevnykh lesov srednego techeniia r. Tavdy i Tavda-Kuminskogo mezhdurech'ia). Akademiia nauk SSSR. Ural'skii nauchnyi tsentr. Institut ekologii rastenii i zhivotnykh. Trudy, 1972, Vol. 83 p. 66-98. In Russian. 21 refs.

Taiga vegetation
Forest ecosystems
Soil classification
USSR-Tavda

28-2666

Komin, G.E., 1970:

Cycles in the dynamics of nature of trees and stands of pinus from the taiga zone of western Siberia. Akad Nauk SSSR Izv Sib Otd Ser Biol Nauk, 3: 36-44. In Russian.

NAL/CAIN

Komin, G. E., 1973:

Effects of climatic and phytocenotic factors on the annual increment of trees in stands. Vliianie klimaticheskikh i fitotsenoticheskikh faktorov na prirost derev'ev v drevostoiakh. Edologiya 1973 No. 1. p. 74-83. In Russian. 16 refs.

Forest tundra.
Tundra soils.
Tundra vegetation.

27-2609

Komin, G.E., 1970:

Ontogeny of swampy North Taiga spruce forests growing east of the Ural Mountains (Ontogenez zabolochennykh severotaevnykh el'nikov Zaural'ia. Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1970 Vol. 77. p. 92-116. In Russian. 33 refs.

Taiga soils.
Taiga vegetation.

26-202

Kondrat'eva, K.A. et al., 1973:

Basic stages of Cenozoic sedimentation in the southern part of the Iana-Indigirka Plain (Osnovnye etapy kainozoiskoi sedimentatsii v iuzhnoi chasti Iano-Indigirskoi nizmennosti). Merzlotnye issledovaniia, 1973, Vol. 13, p. 26-42. In Russian. 20 refs. Khrutskii, S. F., Rybakova, N. F., Pirumova, L. G.

Tundra vegetation
Forest tundra

28-2541

Kondrat'eva, E.V., 1972:

Data on the two-source origin of morainal deposits in the Valdai uplands (Nekotorye dannye o dvuchlennosti morenykh otlozhenii Valdaiskoi vozvshennosti). Vsesoiuznaia akademiia sel'skokhoziaistvennykh nauk. Tsentral'nyi muzei pochvovedeniia. Sbornik trudov, 1972, Vol. 5. Geografiia, genezis i plodorodie pochv (Geography, formation and fertility of soils), p. 74-91. In Russian. 23 refs.

Cryogenic processes.
Soil formation.
Soil profiles.

28-365

Kondratova, I.U.I., 1972:

Microelements as indicators of the degree of landscape differentiation on the Elbrus Mountain (Mikroelementy kak pokazatel' stepeni landshaftnoi differentsiatsii vysokogor'ia (na primere priel'brus'ia). Moscow. Universitet. Vestnik. Seriya 5, Geografiia, Nov.-Dec. 1972, No. 6, p. 100-103. In Russian with English summary. 4 refs.

Alpine soils.
Alpine vegetation.
Plant ecology.
USSR--Caucasus.

28-77

Konoiko, M.A., 1971:

High bog vegetation in Belorussia and its classification (Rastitel'nost' verkhovykh bolot Belorussii i ee klassifikatsiia). Botanicheskii zhurnal, Oct. 1971, 56(10), p. 1407-1420. In Russian with English summary. 16 refs.

Vegetation
Plant ecology

26-2531

Konorovskii, A.K., 1974:

Regimes of cryogenic flood-plain soils in the Lena River valley (Rezhimy merzlotnykh poimennykh pochv doliny Leny) Novosibirsk, Nauka, 168 p. In Russian with abridged English table of contents enclosed. Refs. p. 163-167.

30-16

Konovalov, A.A. et al., 1973:

Thermophysical properties of peat soils. Soil mechanics and foundation engineering, Nov. 1973, 10(3), p. 179-181. Transl. from Osnovaniia, fundamenty i mekhanika gruntov. 6 refs. Roman, L.T.

Active layer
Peat
Soil moisture migration

28-2687

Konstantinova, G.S., 1973:
Erosion relief features of the Yamal interfluvial area. Eroziia Pochv Ruslovye Protessy, 3: 105-115. In Russian.

NAL/CAIN

Konstantinova, G.S., 1975:
The influence of thermoerosion processes on the development of landscapes. Vestn Moskovsk Univ. Geogr, (Ser. 5): 66-71. In Russian. English summary.

NAL/CAIN

Konstantinova, G.S. et al., 1974:
Ravine-type thermoerosional landscape of maritime tundra plain and its dynamics (Ovrazhno-termoerozionnyi landshaft morskoi tundrovoi ravniny i ego dinamika). Moscow. Universitiet. Vestnik. Seriya 5 Geografiia, Jan.-Feb. 1974, No. 1, p. 81-87. In Russian with English summary. 14 refs. Tyrtikov, A.P.

Tundra terrain
Tundra soils

28-3532

Koposov, G.F., 1974:
Soil formation on fine parent material in taiga zone of the north-west of the European USSR. Pochvovedenie, 10: 8-18. In Russian.

NAL/CAIN

Koposov, G.F., 1974:
Soil formation on fine-textured parent materials in the taiga zone of the northwestern part of the European USSR. Sov Soil Sci, 6(5): 529-538. Translated from Pochvovedenie 10: 8-18. In English.

NAL/CAIN

Kornienko, V.A., 1974:
Selection of woody shrubs for planting in central Yakutia (Assortiment drev-esno-kustarnikovyykh rastenii dlia ozeleneniia v tsentral'noi IAKutii) Biologicheskie problemy Severa, VI simpozium, Vypusk, Akademiia nauk SSSR, p. 43-47. In Russian. Petrova, A.E.; Nazarova, E.I.

29-3661

Korobkov, A.A., 1972:
Cytotaxonomical characteristics of some species of the genus Artemisia L. in the north-eastern U.S.S.R. K tsitotaksonomicheskoi kharakteristike nekotorykh vidov roda Artemisia L. severovostoka SSSR. Botanicheski zhurnal. Oct. 1972 57(10). p. 1316-1327. In Russian. 15 refs.

Arctic soils.
Arctic vegetation.

27-2348

Korotkevich, E.S., 1972:
Polar deserts. Poliarnye pustyni. Leningrad, Hidrometeoizdat, 1972. 420 p. In Russian with English table of contents enclosed. 654 refs.

Ecosystems.
Arctic soils.
Deserts.

27-2642

Korovin, A.I., 1975:
Ecologic and physiologic mechanisms of plant adaptation to cold soils (Ekologo-fiziologicheskie mekhanizmy prispobleniia rastenii k kholodnym pochvam) Vsesoiuznaia konferentsiia Pochvennyi kriogenez i melioratsiia merzlotnykh i kholodnykh pochv. Pushchino, Oct., 1975, Materialy Moscow, Nauka, p. 47-49. In Russian.

30-4228

Korzun, M.A., 1975:
Influence of cryogenic processes on the formation and development of lowland peat soils in the eastern Sayan area (Vliianie kriogennykh protsessov na formirovanie i razvitie nizinykh torfiannykh pochv Vostochnogo Prisaian'ia) Vsesoiuznaia konferentsiia Pochvennyi kriogenez i melioratsiia merzlotnykh i kholodnykh pochv. Pushchino, Oct., 1975, Materialy Moscow, Nauka, p. 88-91. In Russian. 2 refs. Simonenkov, N.I.

30-4236

Kosmachev, K.P., 1974:
Pioneer development of taiga (economic and geographic problems) (Pionerno osvoenie taigi (ekonomiko-geograficheskie problemy)) Novosibirsk, Nauka, 144 p. In Russian with English table of contents enclosed.

29-1414

Kosov, B.F., 1973:

Development of gullies in northern west Siberia (Ovrazhnost' severa Zapadnoi Sibiri, Vyp. 4 (Natural conditions in West Siberia, Vol. 4) Edited by A.I. Popov. Moscow, Universitet, p. 104-115. In Russian. 9 refs. Konstantinova, G.S.

29-1218

Kosov, B.F. et al., 1970:

Ravine development in tundra. (Osobennosti ovrazhnoi erozii v tundre) Eroziia pochv i ruslovyte protsessy. 1970 Vol. 1 p. 152-161. In Russian. 16 refs. Konstantinova, G.S.

Tundra soils.
Active layer.
Tundra vegetation.

26-273

Kostiaev, A.G., 1973:

Present views on the origin of polygonal relief of the north (K sostoiianiiu problemy proiskhozhdeniia poligonal'nogo rel'efa Severa). Akademiia nauk SSSR. Doklady, 1973, 210(2), p. 409-410. In Russian. 2 refs.

Patterned ground.
Cryogenic processes.

Kotelina, N.S., 1970:

Biological productivity of forest-tundra meadows (Biologicheskaiia produktivnost' lugov lesotundry) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knozhnoe izd-vo, 1970 p. 20-25. In Russian. 8 refs.

Forest tundra.
Meadow soils.
Tundra soils.
Biomass.

26-1693

Kotelina, N.S., 1974:

Grass stand structure and biological productivity of meadows in the tundra and forest tundra (Struktura travostoia i biologicheskaiia produktivnost' lugov v lesotundre i tundre) Biologicheskie problemy Severa, VI simpozium, Vypusk 5 (Biological problems of the North, 6th symposium, Vol. v) Yakutsk, Akademiia nauk SSSR, p. 82-87. In Russian.

29-3665

Kotliarov, I.I., 1971:

Characteristics of larch forests in southern Magadan (Kratkaia kharakteristika listvennichnikov iuga Magadanskoii oblasti). Akademiia nauk SSSR. Dal'nevostochnyi tsentr. Severo-vostochnyi kompleksnyi institut. Trudy, 1971, Vol. 42, p. 188-197. In Russian. 6 refs.

Forest tundra
Tundra vegetation
Plant ecology
USSR--Magadan

26-1845

Kotliarov, I.I., 1973:

Determining the width of forest strips designed for protection and preservation of water bodies in the far northeast (K voprosu ob obosnovanii shiriny vodookhranno-zashchitnykh lesnykh polos na Krainem Severo-Vostoke) Vladivostok. Cal'nevostochnyi tsentr. Trudy 1973 vol. 12. p. 165-171. In Russian. 24 refs.

30-1577

Kovalev, R.V., 1972:

Generic features and fertility of soils in western Siberia (Geneticheskie osobennosti i voprosy plodorodiia pochv Zapadnoi Sibiri) Novosibirsk, Nauka, 238 p. In Russian.

29-2044

Kovalev, R.V. et al., 1972:

Geographical regularities of soil distribution in west Siberia (Geograficheskie zakonomernosti raspredeleniia pochvennogo polrova Zapadnoi Sibiri). Geograficheskie problemy Sibiri (Geographical problems of Siberia). Novosibirsk, Nauka, 1972, p. 68-106. In Russian with English summary. Trofimov, S.S.

Alpine soils
Tundra soils
Forest tundra

28-2936

Kovalev, R.V., 1970:

Replanting in Siberia and Urals (Rekul'tivatsiia v Sibiri i na Urale) Novosibirsk, "Nauka", 128 p. Summaries and table of contents in English. Trofimov, S.S.

NAL/CAIN

Kovalev, R.V., 1975:

Scientific results of the west Siberian soil excursion. Pochvovedenie, 9: 150-155. In Russian. Khmelev, V.A.; Kurachev, V.M. In Russian.

NAL/CAIN

Kovalev, R.V., 1973:

Soils of the Altai Autonomous region. (Pochvy Gorno-Altayskoi Avtonomnoi Oblasti) Novosibirsk, Nauka, 352 p. In Russian with English table of contents enclosed. Refs. p. 342-351.

29-2118

Kovalev, R.V., 1972:

Study of the soil cover of western Siberia and objectives of future research. In Geneticheskie Osobennosti i Voprosy Plodorodiia Pochv Zapadnoi Sibiri, p. 5-12. In Russian. Trofimov, S.S.

NAL/CAIN

Kovaleva, S.R., 1974:

Forest soils of the mountains bordering the southeastern part of west Siberia (Lesnye pochvy gornogo okaimleniia iugovostoka Zapadnoi Sibiri) Novosibirsk, Nauka, 206 p. In Russian with English table of contents enclosed. Refs. p. 197-205. Korsunov, V.M.; Taranov, S.A.

29-1859

Kovaleva, S.R., 1971:

Soil characteristics of high altitude mountain-forest zone of the Altai Mountains (Kharakteristika pochv verkhnego gorno-lesnogo poiasa Gornogo Altaia). Akademiia nauk SSSR. Sibirskoe otdelenie. Biologicheskii institut. Trudy po lesnomu knozhiaistvu Zapadnoi Sibiri. 1971, Vol. 9, p. 244-260. In Russian. 11 refs. SD95.A6

Alpine vegetation

28-127

Kovda, 1974:

Biological productivity of landscapes in several natural zones (Biologicheskaiia Produktivnost' landshaftov nekotorykh prirodnykh zon) Pochvy i produktivnost' rastitel'nykh soobshchestv. Vyp. 2 (Soils and productivity of plant associations. Vol. 2) Moscow, MGU, p. 5-22. In Russian. 11 refs. Evdokimova, T.I.; Grishina, L. A.; Samoilova, E.M.; Vasil'evskaia, V.D.

29-3323

Kovda, V.A., 1974:

Soils and productivity of plant associations. Vol. 2 (Pochvy i produktivnost' rastitel'nykh soobshchestv. Vyp 2) Moscow, MGU, 228 p. In Russian. Numerous refs.

29-3322

Kozhevnikov, I.U.P., 1974:

An analysis of the flora of the Telekai Grove area (central Chukotka). Bot Zh, 59(7): 967-979. In Russian. English summary.

NAL/CAIN

Kozhevnikov, I.U.P., 1973:

Botanical-geographic observations in the western part of Chukotka Peninsula during 1971-1972 (Botaniko-geograficheskie nabludeniiia na zapade Chukotskogo poluostrova v 1971-1972gg.). Botanicheskii zhurnal, 1973, 58(7), p. 965-980. In Russian with English summary. 22 refs.

Arctic vegetation
Plant ecology
Tundra vegetation

28-1679

Kozhevnikov, I.U.P., 1974:

Flora and environments of the Telekai Grove and its surroundings (Central Chukotka). Bot Zh, 59(4): 502-519. In Russian. English summary.

NAL/CAIN

Kozhevnikov, I.U.P., 1974:

Forests in Chukotka's tundra. Priroda (Mosk), 7: 96-101. In Russian.

NAL/CAIN

Kozhevnikov, I.U.P., 1973:

New floristic finds in the southwestern part of the Chukchi Peninsula. *Novye floristicheskie nakhodki na zapade Chukotskogo poluostrova*. Botanicheskii zhurnal, Feb. 1973 58(2). p. 294-300. In Russian. 17 refs.

Arctic soils.
Arctic vegetation.
Plant ecology.

27-2344

Kozlovskaya, L.S., 1974:

Effect of plant residue breaking by invertebrates on the activity of soil microorganisms (Vliianie razmel'sheniia rastitel'nykh ostatkov bespozvonochnymi na deiatel'nost' pochvennykh mikroorganizmov) Puti izucheniia i osvoeniia bolot severo-zapada evropeiskoi chasti SSSR (Study and reclamation of swamps in the NW European USSR) Leningrad, Nauka, p.93-98. In Russian. 9 refs. Germanova, N.I.; Laskova, L.M.

29-1881

Kozlovskaya, L.S., 1973:

Invertebrates in various stages of swamp biogeocoenoses (Bespozvonochnye razlichnykh iarusov bolotnykh biogeotsenozov) Kompleksnaia otsenka bolot i zabolochennykh lesov v sviazi s ikh melioratsiei (Complex evaluation of swamps and swampy forests in relation to land reclamation) Novosibirsk, Nauka, p. 195-208. In Russian. 19 refs. Meuvvedev, L.N.

29-1034

Krasavtsev, O.A., 1972:

Calorimetry of plants at subzero temperatures (Kalorimetriia rastenii pri temperaturakh nizhe nulii). Moscow, Nauka, 1972, 117 p. In Russian with English table of contents enclosed. 4 pages of references.

Plant ecology.
Plants (botany).

Unique experiments with physiology of plant resistance to frost. Instruments for continuous measure-

Krasavtsev, O.A.

ment of heat transfer in plants. Explanation of killing frost and of experimental hardening methods.

28-632

Krasnoborov, I.M., 1971:

Alpine vegetation in the western part of East Sayan (Vysokogornaia rastitel'nost' zapadnoi chasti Vostochnogo Saiana). *Rastitel'nost' pravoberezh'ia Eniseia* (Vegetation of the right bank of the Yenisey river). Novosibirsk, Nauka, 1971, p. 136-171. In Russian. 20 refs.

Alpine soils
Alpine vegetation
Plant ecology

26-3214

Krasnoborov, I.M., 1971:

Alpine vegetation of the West Sayan Range. *Rastitel'nost' vysokogorii Zapadnogo Saiana*. *Rastitel'nye bogatstva Sibiri* (Vegetation of Siberia). Novosibirsk, Nauka, 1971 p. 249-267. In Russian. 25 refs.

Alpine soils.
Alpine vegetation.
Plant ecology.
USSR-Sayan Mountains.

27-2583.

Krasnoshchekov, I.U.N., 1975:

Vegetation influence on the thawing depth and erosion resistance of cryogenic mountain soils in the Baykal Lake basin (Vliianie rastitel'nosti na glubinu ottaivaniia i protivcerozionnuiu ustoiчивost' gornykh merzlotnykh pochv v basseine oz. Baikal) Vsesoiuznaia konferentsiia Pochvennyi kriogenez i melioratsiia merzlotnykh i kholodnykh pochv. Pushchino, Oct., 1975, Materialy Moscow, nauka, p. 191-193. In Russian.

30-4243

Kravtsova, L.M. et al., 1971:

Variation in the ash-content of dominants in the mountain taiga and permafrost regions (O variatsiakh zol'nosti rastenii-dominantov gornykh taizhno-merzlotnykh raionov). Akademiia nauk SSSR. Dal'nevostochnyi tsentr. Severo-vostochnyi kompleksnyi institut. Trudy, 1971, Vol. 42, p. 221-225. In Russian. 4 refs. Pitul'ko, V.M.

Taiga vegetation
Taiga soils

26-1847

Kriuchkov, V.V., 1975:

Causes of treeless tundra zone. XXIII International Geographical Congress. Symposium: Geography of Polar Countries. Tour K-29, Leningrad, July 22-26, 1976. Extended summaries. Leningrad, Gidrometeorological Publishing House, 1975. p. 5-7.

BROWN

Kriuchkov, V.V., 1975:

The change of the northern environment as a result of its use. XXIII International Geographical Congress. Symposium: Geography of Polar Countries. Tour K-29. Leningrad, Hydrometeorological Publishing House, 1975. p. 129-131.

BROWN

Kriuchkov, V.V., 1973:

Complex landscape units in northwestern Siberia and the problem of tundra woodlessness (Prirodnye territorial'nye komplekсы severa Zapadnoi Sibiri i problema bezles'ia tundra). Zhizn' zemli; sbornik, 1973, Vol. 9, p. 5-28. In Russian. 10 refs.

Tundra soils
Soil profiles
Tundra vegetation

28-3180

Kriuchkov, V.V., 1973:

Far North: Rational utilization of natural resources (Krainii Sever: problemy ratsional'nogo ispol'zovaniia prirodnykh resursov). Moscow, Mysl'. 1973. In Russian with English table of contents enclosed. 5 pages of references.

Tundra soils.
Tundra vegetation.

28-278

Kriuchkov, V.V., 1970:

Forest plant associations in tundra, their origin and dynamics (Lesnye soobshchestva v tundre, vozmozhnost' ikh voznikoveniia i dinamika) Edologiya 1970 No. 6 p. 9-19. In Russian 21 refs.

Tundra soils.
Tundra vegetation.
Ecology.

26-1049

Kriuchkov, V.V., 1975:

Is it possible to put an end to the bogging up of the taiga? Priroda (Mosk), 2: 83-92. In Russian.

NAL/CAIN

Kriuchkov, V.V., 1975:

Landscape and biogeocenotic approach to the problem of woodlessness of tundra (O landshaftno-biogeotsenoticheskom podk-hode pri reshenii problemy bezles'ia tundry) Botanicheskie issledovaniia v IAKutii Yakutsk, IAKutskii filial SO AN SSSR, 1975 p. 79-89 In Russian. 20 refs.

30-3277

Kriuchkov, V.V., 1974:

Landscapes of northern west Siberia and the problems of the lack of forests in tundra (Prirodno territorial'nye komplekсы severa Zapadnoi Sibiri i problemy bezles'ia tundry) Akademiia nauk SSSR. Izvestiia. Seriia geograficheskaiia Jan.-Feb. 1974 No. 1 p. 116-124, In Russian. 5 refs.

29-1551

Kriuchkov, V.V., 1972:

Northernmost forests and tree-growth dynamics (Samye severnye na zemle lesnye massivy i dinamika drevesnoi rastitel'nosti). Zhizn' zemli; sbornik, 1972, No. 8, p. 39-55. In Russian. 19 refs.

Tundra terrain.
Forest tundra.
Tundra soils.

28-203

Kriuchkov, V.V. et al., 1973:

Peculiarities of subarctic landscapes and ways in which they are affected by industrialization processes (Osobennosti landshaftnoi obolochki Subarktkiki i vozdeistvie na nee protsessov industrializatsii). Problemy severa, 1973, Vol. 18, p. 50-63. In Russian. 21 refs. Shvetsov, P.F.

Subarctic soils
Subarctic vegetation

28-3743

Kriuchkov, V.V., 1973:

Permafrost effect on the northern forest line (Vliianie vechnoi merzloty na rasprostranenie severnoi granitsy lesov). International Conference on Permafrost, 2nd, Yakutsk, 1973 1973, Vol. 2, p. 120-124. In Russian. 3 refs.

Tundra vegetation.
Plant ecology.

28-1051

Kriuchkov, V.V., 1973:

Possibilities of transforming natural environments in the northern part of west Siberia (Voz-mozhnosti preobrazovaniia prirody na severe Zapadnoi Sibiri). Problemy severa, 1973, Vol. 18, p. 87-99. In Russian. 13 refs.

Tundra soils

28-3746

Kriuchkov, V.V., 1972:

Problems of the reclamation of the far north. Priroda (Mosco), 1: 74-82. In Russian.

NAL/CAIN

Kriuchkov, V.V., 1976:

The sensitive subarctic. CRREL translation 1976, 135 pp.

BROWN

Kriuchkov, V.V., 1971:

Short historical and geographic review of literature dealing with the causes of tundra woodlessness. Kratkaiia istoriia i geografiia predstavlenii o prichinakh bezles'ia tundry. Zhizn' zemli; sbornik 1971 No. 7, p. 227-240. In Russian. 49 refs.

Tundra.

Bibliographies.

27-427

Kriuchkov, V.V., 1970:

Spotted and polygonal soil patterns as landscape phenomena of the Arctic and Subarctic regions (Poligonal'no-piatnistye prirodno-territorial'nye komplekсы kak landshaftno-zonal'noe iavlenie Arktiki i Subarktiki). Zhizn' zemli; sbornik, 1970, Vol. 6, p. 102-120. In Russian. 30 refs.

Arctic soils

Subarctic soils

Patterned ground

26-2503

Kriuchkov, V.V., 1971:

Tundras in northeastern Asia and the causes of their woodlessness. O tundrakh severo-vostoka Azii i prichinakh ikh bezles'ia. Zhizn' zemli; sbornik, 1971 No. 7, p. 85-99. In Russian. 22 refs.

Tundra.

27-425

Kriuchkov, V.V., 1972:

World's northernmost forests (Samye severnye lesa na Zemle). Priroda, 1972, No. 12, p. 93-95.

Forest tundra

Tundra soils

Plant ecology

28-3022

Kruchinin, I.U.A., 1973:

Physiographic zoning of the northern Taymyr (Fiziko-geograficheskoe raionirovanie severnogo Taymyra). Leningrad. Arkticheskii i Antarkticheskii nauchno-issledovatel'skii institut. Trudy, 1973, Vol. 318, p. 32-44. In Russian. 19 refs.

Deserts

Tundra terrain

Alpine vegetation

USSR--Taymyr

28-3803

Krylov, G.V., 1971:

Biological and forestry bases for increasing productivity of taiga forests of western Siberia (Biologo-lesovodstvennye osnovy povysheniia produktivnosti taezhnykh lesov Zapadnoi Sibiri). Akademii nauk SSR. Sibirskoe otdelenie. Biologicheskii institut. Trudy po lesnomu khoziaistvu Zapadnoi Sibiri, 1971, Vol. 9, p. 3-18. In Russian. 13 refs. SD95.A6

Taiga soils.

Taiga vegetation.

28-114

Krylov, G.V., 1970:

Dynamics of the forest forming process in the forests of western Siberia in relation to climatic fluctuations. Akad Nauk SSSR Izv Sib Otd Ser Biol Nauk, 5: 8-12. In Russian. Talantsev, N.K.

NAL/CAIN

Krylov, G.V., 1972:

The greenery of Novosibirsk--its importance for health and problems of its preservation. Tr Biol Inst. Akad Nauk SSSR Sibirsk Otd, 15: 151-158. In Russian. Priazhnikov, A.N.; Bokk, E.N.; Salatova, N.G.

NAL/CAIN

Krylov, G.V., 1970:

Soil melioration in the agriculture and forestry of west Siberia (Agrolesomelioratsiia v Zapadnoi Sibiri) Moscow, Lesnaia promyshlennost', 1970 152 p. In Russian with English table of contents. 33 refs. Lamin, L.A.

29-1463

Krylov, G.V., 1972:

Status and problems of further research in forest protection in western Siberia. Tr Biol Inst. Akad Nauk SSSR Sibirsk Otd, 15:159-164. In Russian. Lamin, L.A.

NAL/CAIN

Krylov, V.F., 1976:

The effect of different coal-mining methods on the surrounding medium in permafrost areas. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 38-39.

BROWN

Ksenofontov, V., 1973:

Growing grain crops on permafrost (Vozdelyvaie zernovye na vechnoi merzlotte) Izobretatel' i ratsionalizator Oct. 1973 No. 10 p. 11-12. In Russian.

29-11

Kudriavtsev, V.A., 1975:

The characteristics of simulating natural and natural-engineering systems in permafrost regions. XXIII International Geographical Congress. Symposium: Geography of Polar Countries. Tour K-29, Leningrad, July 22-26, 1976. Extended summaries. Leningrad, Hudrometeorological Publishing House, 1975. p. 32-34.

BROWN

Kudriavtsev, V.A., 1975:

Forecasting and evaluation of environmental changes in the process of economic development. Environment Protection in Relation to Economic Development of Permafrost Regions. Abstracts of Papers presented at a Conference. p. 45-46. In Russian.

BROWN

Kudriavtsev, V.A. et al., 1973:

Moisture migration in fine-grained soils of different composition, structure and properties (Migratsiia vlazi v dispersnykh gruntakh razlichnogo sostava, stroeniia, slozheniia i svoistv). International Conference on Permafrost, 2nd, Yakutsky, 1973, Vol. 4, p. 125-134. In Russian. 15 refs.

Soil moisture.

28-1094

Kukk, E. K., 1970:

Algal flora of the polar Urals in the vicinity of Sivaya Maska (Al'goflora Poliarnogo Urala i okrestnostei Sivoi Maski). Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North). Syktyvkar, Komi knizhnoe izd-vo, 1970, p. 262-265. In Russian. 12 refs.

Plant ecology
USSR--Ural Mountains

26-1729

Kulagin, I.U., 1976:

Permafrost in the Bashkir area to the west of the Ural mountains (O mnogoletnei pochvennoi merzlotte v Bashkirskom Predural'e) Ekologiiia Mar.-Apr. 1976 No.2 p. 24-29 In Russian. 16 refs.

30-4112

Kulai, G.A., 1974:

Composition and dynamics of microflora in forest tundra soils (Sostav i dinamika mikroflory pochv lesotundry) Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1974 Vol. 88 p. 72-86. In Russian. 13 refs. Ishchenko, N.F.

30-446

Kulai, G.A., 1970:

Formation of microbe coenoses in mountain-forest soils of the northern Urals (Osobennosti formirovaniia mikrobykh tsenozov v gorno-lesnykh pochvakh Severnogo Urala). Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy, 1970, Vol. 76, p. 29-49. In Russian. 7 refs.

Mountain soils
Forest soils
Soil formation
USSR--Ural Mountains

26-1867

Kulai, G.A., 1972:

Microbiological activity in mountain forest soils of southern taiga in Ural Mountains and the Transural region (Mikrobiologicheskaya aktivnost' gornolesnykh pochv iuzhnoi taigi Urala i Zaural'ia) Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1972 vol. 85 p. 164-186. In Russian. 4 refs.

29-1233

Kulai, G.A. et al., 1970:

Microbiological characteristics of soils along the Ob'-Ivdel' railroad line (Mikrobiologicheskaya kharakteristika pochv zhelezodorozhnoi trassy Ivdel'-Ob'). Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy, 1970, Vol. 76, p. 115-123. In Russian. 8 refs. Khrenova, G.S.

Taiga soils

Taiga vegetation

26-1872

Kulai, G.A., 1973:

Microflora of spruce forest soils in middle taiga of the Urals. Pochvovedenie 10: 57-65. In Russian. English summary.

NAL/CAIN

(Lockheed)

Kulikova, G.G. et al., 1971:

Peatbog vegetation in the central course of the Ob' river and factors governing its distribution. (Rastitel'nyi pokrov torfianykh bolot srednego priob'ia i zakonomernosti ego razmesheniia). Moscow. Universitet. Vestnik. Seriya 6. Biologiya i pochvovedenie. March-April 1971 No. 2 p. 53-57. In Russian. 3 refs. Liss, O.L.; Predtechenskii, A.V.; Skobeeva, E.I.; Tiuremnov, S.N.

Peat.

Tundra soils.

Tundra vegetation.

26-132

Kuminova, A.V., 1971:

Basic results of the study of vegetative cover of the right embankment of Yenisei River. In Rastitel'nosti pravoberezh'ia Eniseia; Iuzhnaia chast' Krasnoiarskogo Kraia. p. 3-20. In Russian.

NAL/CAIN

Kuminova, A.V., 1971:

Detailed geobotanical subdivision of a part of the Altay-Sayan geobotanical region (Right bank of the Yenisey River) (Drobnoe geobotanicheskoe raionirovanie chasti Altae-Saiianskoi geobotanicheskoi oblasti (pravoberezh'e Eniseia)). Rastitel'nost' pravoberezh'ia Eniseia (Vegetation of the right bank of the Yenisey river). Novosibirsk, Nauka, 1971, p. 67-135. In Russian. 28 refs.

2

Kuminova, A.V., 1971

Alpine soils

Alpine vegetation

Plant ecology

USSR--Yenisey River

26-3213

Kuminova, A.V., 1970:

Detailed geobotanical subdivision of the mountain-Taiga territories in the eastern part of West Sayan. Drobnoe geobotanicheskoe raionirovanie gornotaezhnykh territorii (na primere vostochnoi chasti Zapadnogo Saiana. Akademiia nauk SSSR. Sibirskoe otdelenie. Institut geografii Sibiri i Dal'nego Vostoka. Doklady, 1970. Vol. 25. p. 57-61. In Russian.

Taiga.

Geobotanical interpretation.

27-1735

Kuminova, A. V., 1973:

Formation of geobotanical complexes at the junction of sub-taiga and forested steppe regions of the Ob' River valley. (Formirovanie geobotanicheskikh kompleksov na styke podtaezhnykh i lesostepnykh raionov Priob'ia). Rastitel'nost' Priob'ia i ee khoziaistvennoe ispol'zovanie (Vegetation of the Ob' River valley and its economic usefulness). Novosibirsk, Nauka, 1973, p. 79-97. In Russian.

Forest ecosystems

Vegetation patterns

Taiga vegetation

28-1931

Kuminova, A.V., 1970:

Vegetation and vegetative resources of Shushensk District in Krasnoiarsk region. Akad Nauk SSSR Izv Otd Ser Biol Nauk, 10(2): 3-14. In Russian.

NAL/CAIN

Kuminova, A.V., 1971:
Vegetation on the right bank of the Yenisei: southern Krasnoyarsk region. (Rastitel'nosti pravoberezh'ia Eniseia/Iuzhnaia chast'Krasnoiarskogo Kraia. Novosibirsk. "Nauka" Sibirskoe Otd-Nie, 377 p. In Russian.

NAL/CAIN

Kurmangaliev, A.B., 1972:
Amount of micronutrients in primary alpine soils of the Transili Alatau. Tr Inst Pochvoved, Akad Nauk Kaz SSR 21: 71-80. In Russian. Nasyrov, R.M.

NAL/CAIN (Lockheed)

Kuz'min, V.A., 1970:
Effect of the composition of litter on soil formation on the Patomskoe plateau. O vlianii sostava podstilok na pochvoobrazovanie v usloviakh Patomskogo nagor'ia. Akademiia nauk SSSR. Sibirskoe otdelenie. Institut geografie Sibir i Dal'nego Vostoka. Doklady 1970 Vol. 27. p. 60-66. In Russian. 12 refs.

Alpine soils.
Alpine vegetation.
Plant ecology.

27-1786

Kuz'min, V.A., 1975:
Humus composition in soils of the Lake Baikal basin. Pochvovedenie, 8: 91-98. In Russian. English summary. Chernegova, L.G.

NAL/CAIN

Kuz'min, V.A., 1975:
Humus composition of soils in the Lake Baykal basin. Sov Soil Sci, 7(14): 450-457. In English. Translated from Pochvovedenie 8: 91-98. Chernegova, L.G.

NAL/CAIN

Kuz'min, V.A., 1973:
Mountain soils of the Cis-Baikal area. Pochvovedenie, 9: 11-21. In Russian. English summary.

NAL/CAIN

Kuz'min, V.A., 1970:
Soil formation in Transbaikal (Osobennosti pochvoobrazovaniia v Pribaikal'e) Pochvy iuga Srednei Sibiri i ikh ispol'zovanie (Soils of south central Siberia and their utilization) Irkutsk, 1970 p. 14-19. In Russian. 14 refs.

29-2114

Kuznetsov, I.U.V., 1975:
Forecasting changes in some elements of natural environments caused by the disturbance of permafrost conditions during agricultural development of high-lands in the North-East USSR. Environment Protection in Relation to Economic Development of Permafrost Regions. Abstracts of Papers presented at a Conference.p. 47-48. In Russian.

BROWN

Kuznetsova, M.S., 1970:
Ecology of some basic components of the rhacomitrium tundra in the Polar Urals. Antekologiya nekotorykh osnovnykh komponentov rakomitrievoi tundry Poliarnogo Urala. Perm'. Universitet. Uchenye zapiski, 1970, No. 206, p. 47-57. In Russian. 17 refs.

Tundra soils.
Tundra vegetation.
Plant ecology.
USSR--Ural Mountains.

27-526

Lakyzhenskaia, K.I. et al., 1971:
Ecologic and morphologic peculiarities of hepatic mosses in the high latitude arctic (Ekologo-morfologicheskie osobennosti pechenochnykh mkhov v usloviakh vysokoshirotnoi Arktiki) Ekologiya 1971 No. 3 p. 26-30. In Russian. 7 refs. Zhukova, A.L.

Ecology
26-1055

Lamin, L.A., 1972:
Historical outline of reforestation investigations in western Siberia. Akad Nauk SSSR Sibirsk Otd Biol Inst Tr, 15: 179-207. In Russian.

NAL/CAIN

Lamin, L.A., 1971:

Natural regeneration processes in West Siberian protective forest strips (Protessy estestvennogo vozobnovleniia v polezashchitnykh lesnykh polosakh Zapadnoi Sibiri). Akademiia nauk SSSR. Sibirskoe otdelenie. Biologicheskii institut. Trudy po lesnomu khoziaistvu Zapadnoi Sibiri. 1971, Vol. 9, p. 179-185. In Russian. 11 refs. SD95.A6

Protective vegetation.
Vegetation patterns.

28-121

Lapazina, T.M., 1971:

Comparative study of humus composition of solodic and podsolized soils of west Siberia. Sravnitel'naiia kharakteristika sostava gumusa osolodelykh i opodzolennykh pochv Zapadnoi Sibiri. Akademiia nauk SSSR. Sibirskoe otdelenie. Izvestiia. Seriia biologicheskikh nauk. Dec. 1971 3(15). p. 9-15. In Russian with English summary. 6 refs.

Forest soils.
Soil formation.

Lapazina, T.M., 1971:

Forest vegetation.
USSR--Novosibirsk.

27-1772

Lapazina, T.M., 1972:

Composition and properties of humic substances of gray forest soils of the Cis-Salair forest-steppe region. In Geneticheskie Osobennosti i Voprosy Plodородiia Pochv Zapadnoi Sibiri, p. 77-85.

NAL/CAIN

Lapina, N.N., 1973:

Certain chemical processes, which take place in clayey and sandy ground at subzero temperatures (0 nekotorykh khimicheskikh protsessakh, protekaiushchikh v gliinistykh i peschanykh gruntakh pri otritsatel'noi temperature). International Conference on Permafrost, 2nd, Yakutsk, 1973 1973, Vol. 5, p. 94-98. In Russian.

Cryogenic processes.
Clays.
Sands.

28-1129

Lapshina, E.I., 1973:

Geobotanical mapping of the taiga zone in west Siberia (Geobotanicheskoe kartografirovaniie taizhnoi zony Zapadnoi Sibiri). Geobotanicheskoe kartografirovaniie (Geobotanical mapping). Leningrad, Nauka, 1973, p. 49-60. In Russian. 9 refs.

Taiga vegetation
Geobotanical interpretation

28-3529

Lapshina, E.I., 1971:

Vegetation and soils of the Yenisei River crest, southern part. In Rastitel'nosti pravoberezh'ia Eniseia; Iuzhnaia chast' Krasnoiarskogo Kraia. p. 21-66. In Russian. Gorbachev, V.N.; Khranov, A.A.

NAL/CAIN

Larina, T.G., 1970:

"Swamps" as displayed by the geographic museum (Tema "Bolota" v ekspozitsii muzeia zemlevedeniia). Zhizn' zemli; sbornik, 1970, Vol. 6, p. 181-187. In Russian. 13 refs.

Arctic soils
Subarctic soils
Soil moisture migration

26-2506

Lashchinskii, N.N., 1974:

Correlation between species and undergrowth structure in pine forests with cranberry and lichens in the lower Angara region (Sopriazhennost' mezhdru vidami i struktura napochvennogo pokrova v lishainikovo-brusnichnykh sosniakakh Nizhnego Priangar'ia) Akademiia nauk SSSR. Sibirskoe otdelenie. Izvestiia. Seriia biologicheskikh nauk Dec. 1974 3(15) p. 22-26. In Russian with English summary. 11 refs.

30-147

Lashchinskii, N.N., 1974:

Experimental study of forest regeneration in the grass pine forests at the lower course of the Angara River (Eksperimental'noe izuchenie lesovozobnovitel'nogo protsessa v travianykh borakh nizhnego Priangar'ia) Lesovedenie Sept.-Oct. 1974 No. 5 p. 31-39. In Russian with English summary. 23 refs.

29-17

Lashchinskii, N.N., 1975:

Floristic composition of grassy pine forests near the lower Angara River (Osobennosti floristicheskogo sostava travianykh sosnovykh lesov Mizhnego Priangar'ia) Akademiia nauk SSSR. Sibirskoe otdelenie. Izvestiia. Seriiia biologicheskikh nauk Aug. 1975 No.10. In Russian with English summary. 19 refs. Roginskaia, A. V.

30-3121

Lavrenko, N.N., 1970:

Vegetational cover of the OMSK region. Osobennosti rastitel'nogo pokrova Omskoi oblasti. Akademiia nauk SSSR. Sibirskoe otdelenie. Institut geografii Sibiri i Dal'nego Vostoka. Doklady, 1970 Vol. 27. p. 38-47. In Russian. 17 refs.

Taiga.
USSR--OMSK.

27-1784

Leshchikov, F.N. et al., 1973:

Variation of the composition and properties of clayey ground during freezing (Izmenenie sostava i svoistv glinistykh gruntov pri promerzanii). International Conference on Permafrost, 2nd, Yakutsk, 1973 1973, Vol. 3, p. 76-79. In Russian. 3 refs. Riashchenko, T.G.

Clay soils.

28-1071

Liakhova, I.G., 1972:

Ridge-pool complexes of the Khotkhursk swamp (Griadovo-mochazhinnye komplekxy Khotkhurskogo bolotnogo massiva). Akademiia nauk SSSR. Sibirskoe otdelenie. Izvestiia. Seriiia biologicheskikh nauk. Dec. 1972, 15(3), p. 60-64. In Russian with English summary. 3 refs.

Peat.
Vegetation.
Plant ecology.

28-415

Liepa, I.IA., 1971:

Systems approach and mathematical modelling in biogeocenology (Sistemnyi podkhod i matematicheskoe modelirovanie v biogeotsenologii) Botanicheskii zhurnal. May 1971. 56(5) p. 577-580. In Russian with English summary. 8 refs.

Plant ecology.
Ecosystems.

26-460

Likhanov, B.N., 1972:

Environmental conditions of the development of the Taz oil and gas area (Prirodnyye usloviya osvoyeniya Tazovskogo neftegazonosnogo rayona) Moscow, Izd. Nauka, 231 p. In Russian.

GeoRef

Listov, A.A., 1974:

Hindered growth of pine regrowths in the northern taiga lichen pine forests (Ob ugnetenom roste podrosta sosny v severotaishnykh lishainikovykh borakh) Lesovedenie 1974 No.2 p. 35-43 In Russian with English summary. 22 refs.

29-750

Liverovskaia, I. T., 1970:

Arctic tundra soils of the Yamal Peninsula at the "West Siberia" exhibition of the Moscow State University geographic museum (Osobennosti pochv i pochvennogo pokrova arkticheskoi tundry poluostrova Iamal na stende "Zapadnaia Sibir'" v muzee zemlevedeniia MGU). Zhizn' zemli; sbornik, 1970, Vol. 6, p. 169-178. In Russian. 22 refs.

Arctic soils
Subarctic soils
Tundra soils

26-2505

Liverovskaia, I.T., 1976:

Changes in the properties of soils developed on eastern foothills of the Polar Ural Mountains and the adjacent plain, caused by construction of lineat structures (pipelines) and the recommendations concerning their restoration. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 17-18.

BROWN

Liverovskaia, I.T., 1972:

New data on the classification, origin and geography of soils in the West Siberia tundras (Novye materialy po geografii, genezisu i klassifikatsii pochv zapadno-sibirskoi tundry). Zhizn' zemli; sbornik, 1972, No. 8, p. 31-39. In Russian. 18 refs.

Tundra soils.
Soil formation.
Soil profiles.

28-202

Logutenko, N. V. et al., 1973:

Role of mineral nutrients in the growth of meadow vegetation and in soil fertility in fallow land of the Ob' River valley (Rol' mineral'noi podkormki v stanovlenii lugovoi rastitel'nosti i pochvennogo plodorodiia na zaleznykh zemliakh Priob'ia). Rastitel'nost' Priob'ia i ee khoziaistvennoe ispol'zovanie lesostepnykh raionov Priob'ia. Novosibirsk, Nauka, 1973, p. 212-231. In Russian. 9 refs. Sukhinina, L. A., Trubetskaia, A. P.

Lovelius, N.V., 1972:

Methods of studying annual tree rings (K metodike dendroindikatsionnykh issledovanii). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 69-73. In Russian. 25 refs.

Taiga vegetation.
Forest tundra.
Plant ecology.

2

28-1258

Logutenko, N. V. et al., 1973

Meadow soils
Vegetation
Soil moisture

28-1934

Lovelius, N.V., 1972:

Reconstruction of the course of meteorological processes on the basis of the annual tree rings along the northern and altitudinal forest boundaries. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee. April 1972 p. 248-260. 18 refs.

Forest tundra.
Trees(plants).

27-2688

Lokinskaia, M.A., 1971:

Vegetational resources of the Madadan region (Rastitel'nye resursy Magadanskoi oblasti). Khabarovsk. Gosudarstvennyi pedagogicheskii institut. Uchenye zapiski, 1971, Vol. 34, p. 72-79. In Russian. 6 refs.

Forest tundra.
Plant ecology.
Tundra soils.

Lukanenkova, V.K., 1971:

Natural conditions and vegetation of the south Pamirs. Prirodnye osobennosti i rastitel'nyi pokrov. IUzhnogo Pamira. Leningrad, Nauka, 1971, 136 p. In Russian with English table of contents enclosed. 309 refs.

Alpine soils.
Alpine vegetation.
Plant ecology.
USSR--Pamirs

28-1304

Lovelius, N.V., 1971:

The evaluation of the dynamics of seasonal increment of larix dahurica in a forest tract Ary-Mas (Taimyr peninsula, 72 degrees 30' northern latitude) Bot Zh, 60(10): 1476-1479. In Russian.

NAL/CAIN

27-133

Lukashev, G.N., 1973:

Possibility of using aerial photographs in the large-scale geological mapping of alpine land forms in the Altay-Sayan folded region (O vozmozhnostiakh ispol'zovaniia materialov aerofotos'emki pri krupnomasshtabrom geologicheskoi kartirovani gornykh raionov Altae-Saianskoi skladchatoi oblasti). Aerofotos'emka - metod izucheniia prirodnoi sredy (Aerial photography as a method of studying natural environments). Leningrad, Nauka, 1973, p. 130-135. In Russian. 1 ref.

Lovelius, N.V., 1972:

Fluctuations in the tree ring accretion of fir and larch in central Yakutia. Kolebania prirosta godichnykh kolets eli i listvennitsy v Tsentral'noi Iakutii. Geograficheskoe obshchestvo SSSR. Izvestiia May-June 1972, 104(3), p. 217-220. In Russian. 3 refs.

Taiga soils.
Taiga vegetation.
Plant ecology.
USSR--Yakutia.

Lukashev, G.N., 1973

Geobotanical interpretation.
Alpine vegetation.

27-878

28-1474

Lukicheva, A.N., 1972:

Regularities governing vertical zonation of vegetation in relation to topographic effect and rock types in the Baykal Ridge. Zakonomernosti vertikal'noi poiasnosti rastitel'nosti, sviazannye s osobennostiami rel'efa i gornykh porod (na primere Baikal'skogo khrebt. Akademiia nauk SSSR. Sibirskoe otdelenie. Limnologicheskii institut. Trudy. 1972 13(4). Geobotanicheskie issledovaniia i dinamika beregov i sklonov na Baikale (Geobotanical investigation and the dynamics of Lake Baykal shores and slopes).

Lukicheva, A.N., 1972:

p. 3-70. In Russian. Refs. p. 65-70.

Alpine soils.
Alpine vegetation.
Tundra vegetation.
USSR-Baykal Lake.

27-2544

Makeev, O.V., 1973:

Microelements in the soils of Siberia and the far east (Mikroelementy v pochvakh Sibiri i Dal'nego Vostoka) Moscow, Nauka, 151 p. In Russian with English table of contents enclosed. Refs. p. 143-150.

30-739

Makeev, O.V., 1972:

Soil cryogenesis; theoretical and practical aspects (Pochvennyi kriogenez (Teoreticheskie i prakticheskie aspekty) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 17-23. In Russian with English summary. 12 refs.

30-674

Makeev, V.M., 1973:

Altiplanation terraces in the eastern offshoots of Byrranga Mountains (Nagornye terrasy vostochnykh otrogov Byrranga). Leningrad. Arkticheskii i Antarkticheskii nauchno-issledovatel'skii institut. Trudy, 1973, Vol. 318, p. 140-148. In Russian. 13 refs.

Cryogenic soils
Soil formation
USSR--Taymyr

28-3808

Makhatadze, L.B. et al., 1971:

Regularities governing spreading of subalpine forests in the Caucasus (Zakonomernosti rasprostraneniia subal'piiskikh lesov Kavkaza) Akademiia nauk SSSR. Izvestiia. Seriia geograficheskai March-April 1971 no. 2 p. 92-98. In Russian. 18 refs. Urushdze, T.F.

Alpine soils.
Alpine vegetation.
Forest ecosystems.

26-937

Makhatadze, L.B., 1973:

Subalpine forests of the Caucasus. Lesn Khoz, 3: 43-45. In Russian.

NAL/CAIN

Makaveev, N.I., 1974:

Erosion processes in various natural zones of the USSR. Trans Int Congr Soil Sci, 10th (v.11): 38-44. In Russian. English summary. Zaslavskii, M.N.; Kosov, B.F.

NAL/CAIN

Makovskii, V.I. et al., 1972:

Classification of swamp forests in the Tavda-Kuma interfluvium (Tipologiya zabolochennykh i bolotnykh lesov Tavda-Kuminskogo mezhdurech'ia). Akademiia nauk SSSR. Ural'skii nauchnyi tsentr. Institut ekologii rastenii i zhivotnykh. Trudy, 1972, Vol. 83, p. 131-163. In Russian. 23 refs. Shadrina, N.I.

Taiga vegetation
Forest ecosystems
Soil composition
USSR--Tavda

28-2668

Maksimova, L.M. et al., 1973:

Relation between long-term dynamics of seasonal ground thawing and the variations in soil moisture before winter (Zavisimost' mnogoletnei dinamiki sezonnogo protaivaniia gruntov ot izmenenii ikh predzimnei vlazhnosti). Merzlotnye issledovaniia, 1973, Vol. 13, p. 110-115. In Russian. 5 refs. Minailov, G. P.

Soil moisture

28-2548

Makunina, A.A., 1972:

Landscape map of the Ural mountains (Landshaft-naia karta Urala). Landshaftnoe kartografirovaniie i fiziko-geograficheskoe raionirovaniie gornyykh oblastei (Landscape mapping and physiographic zoning of mountain regions), N.A. Gvozdetskii, ed. MGU, 1972, p. 119-154. In Russian. 31 refs.

Tundra vegetation.

Tundra soils.

Forest tundra.

USSR--Ural Mountains.

28-732

Malinowsky, K.A., 1975:

Productivity of mountain communities of the USSR. Resources of the biosphere (synthesis of the Soviet studies for the International Biological Programme) Vol. 1. Leningrad, Nauka, p. 167-198.

BROWN

Malyshev, A. A., 1973:

Changes of growth processes in plants in mountains due to sharp alterations of ecological conditions (Izmenenie rostovykh protsessov u rastenii v gorakh pri rezkoi smene ekologicheskikh uslovii). Botanicheskii zhurnal, 1973, 58(11), p. 1669-1673. In Russian. 6 refs.

Alpine soils

Alpine vegetation

Plant ecology

28-1980

Malysheva, T. V., 1973:

Character of seasonal development of moss and lichens in the pine forests of the southern taiga (Kharakter sezonnogo razvitiia mkhov i lishainkov v sosniakhkh yuzhnoi taigi). Produktivnost' i struktura rastitel'nosti molodykh sosniakov (Productivity and structure of the vegetation in young pine forests). Moscow, Nauka, 1973, pp. 110-142. In Russian. Refs. p. 140-142.

Forest ecosystems

Vegetation patterns

Lichens

28-2153

Malysheva, T.V., 1971:

On the manifestation of natural seeding in pinus-vaccinium forests. Les Khoz, 9: 29. In Russian.

NAL/CAIN

Malysheva, G.S., 1974:

Peculiarities of the spruce forests vegetation in the southern taiga of the European part of the USSR. Lesovedenie 2: 67-74. In Russian. English summary.

NAL/CAIN

(Lockheed)

Mammedov, R.G., 1971:

Thermophysical properties of alpine Chestnut soils of the southeastern part of the Greater Caucasus. USSR. Akad Nauk Azerbaidzh Ssr Izv Ser Biol Med Nauk 3: 69-76. In Azerbaidzhan. Russian summary. Mammedov, G.M.

NAL/CAIN

Mamytov, A.M., 1974:

On the classification and systematics of mountain soils in Kirgizia. Trans Int Congr Soil Sci, 10th (v.6, pt. 2): 530-536. In Russian. English summary.

NAL/CAIN

Mamytov, A.M. et al., 1971:

Soils in the high-altitude cold deserts of Tien Shan (Pochvy vysokogornyykh kholodnykh postny' Tian'-Shania). Problemy osvoeniia pustyn', 1971, No. 1, p. 3-12. In Russian with English summary. 12 refs. Sukhachev, A.G.

Deserts

Desert soils

Soil formation

USSR--Tien Shan

28-2280

Mamytov, A.M., 1975:

S.S. Neustruev ideas on mountain soil formation and their development in works of Kirghiz soil scientists. Pochvovedenie, 7: 34-35. In Russian.

NAL/CAIN

Manakov, K.N., 1970:

Elements of biological cycles in the polar north (Elementy biologicheskogo Krugovorota na Poliarnom Severe) Leningrad, Nauka, 160 p. In Russian with English table of contents. 102 refs.

25-2959

Manakov, K.N., 1971:

Elements of the biological cycle in forest-tundra landscapes of the Kola Peninsula (Elementy biologicheskogo krugovorota v lesotundrovyykh landshaftakh Kol'skogo poluostrova). Biologicheskaya produktivnost' i krugovorot khimicheskikh elementov v rastitel'nykh soobshchestvakh (Biological productivity and mineral cycling in terrestrial plant communities) Leningrad, Nauka, 1971, p. 207-212. In Russian. 12 refs. QH541.3.B56

Manakov, K.N., 1971

Forest tundra
plant ecology
Tundra vegetation

28-2756

Manakov, K.N., 1970:

Humus-illuvial soils of tundra and forest tundra in the Kola Peninsula (Gumuso-illuvial'nye pochvy tundry i lesotundry Kol'skogo poluostrova) Akademiya nauk S_SSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) syktyvkar, Komi knizhnoe izd-vo, 1970 p. 129-134. In Russian. 10 ref.

Forest tundra.
Tundra soils.
Tundra vegetation.
USSR-Kola Peninsula.
26-1712

Manakov, K.N., 1972:

Productivity and biological turnover in the tundra biogeocoenoses of the Kola Peninsula (Produktivnost' i biologicheskii krugovorot v tundrovyykh biogeotsenozakh kol'skogo poluostrova) Leningrad, Nauka, 148 p. In Russian with abridged English table of contents enclosed. Refs. p. 142-147.

30-254

Mandarov, A.A. et al., 1973:

Moisture migration and thermal cycles in freezing ground (Migratsiia vlagi i teplooboroty v promerzaiushchem grunte). Problemy geokriologii (Problems in geocryology). Novosibirsk, Nauka, 1973 p. 70-77. In Russian. 10 refs.

Active layer.
Soil moisture migration.

28-1377

Maradudin, I.I., 1971:

Natural regeneration of Siberian firs under vegetative cover in Salair (Estestvennoe vozobnovlenie pikhty sibirskoi pod pologom nasazhdenii na Salaire). Akademiya nauk SSSR. Sibirskoe otdelenie. Biologicheskii institut. Trudy po lesnomu khozhiaistvu Zapadnoi Sibiri. 1971, Vol. 9, p. 195-200. In Russian. 6 refs. SD95.A6.

Alpine soils.
Alpine vegetation.
Vegetation patterns.

28-123

Mart'ianova, G.N., 1976:

Optimal utilization of steppe geosystems subject to prolonged seasonal freezing. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 19-20.

BROWN

Martin, I.U.L., 1970:

Role of lichens in some biogeocoenoses of the polar Urals (Rol'lishainikov v enkotorykh biogeotsenozakh Poliarnogo Urala) Akademiya nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North). Syktyvkar, Komi knizhnoe izd-vo; 1970 p. 85-89. In Russian. 15 refs.

Arctic vegetation.
Lichens.
Biomass.

26-1704

Martynenko, V.A., 1973:

Comparison of some taiga vegetation in the Vyhegda and Pechora River basins (Sravenenie nekotorykh boreal'nykh flor basseinov Vyhegdy i Pechory). Geograficheskoe obshchestvo SSSR. Komi filial. Izvestiia, 1973, 2(5), p. 85-87. In Russian. 8 refs.

Taiga soils
Taiga vegetation
Forest tundra

28-4252

Matveeva, N.V. et al, 1975:

A brief essay on the vegetation in the vicinity of the Taymyr Biogeocoenological Station. International Tundra Biome translation Jan. 1975 no. 13. 51 p. Translated from Biogeocoenoses of Taymyr and their productivity. Vol. 2. Leningrad, Nauka, 1973, p. 7-49. Refs. p. 49-51. For Russian original see 28-4109.

Tundra vegetation
Plant ecology

BROWN

Matveeva, N.V., 1971:

Dynamics of permafrost thawing in west Taymyr tundra (Dinamika ottaivaniia merzloty v tundrakh zapadnogo Taimyra) Biogeotsenozy Taimyrskoi tundry i ikh produktivnost' (Biogeocenoses of Taymyr tundra and their productivity) Leningrad, Nauka, p. 45-56. In Russian with English summary.

27-1542

Matveeva, N.V., 1971:

Dynamics of thawing of frozen ground in tundras of western Taimyr. Dinamika ottaivaniia merzloty v tundrakh zapadnogo Taimyra. International Tundra Biome Translation 6, translated from Biogeocenoses of Taimyr Tundra and their productivity, Vol. 1, 1971, p. 45-55.

BROWN

Matveeva, N.V., 1975:

Maria Pronchitsheva Bay, USSR. Sweden. Statens naturvetenskapliga forskningsrad. NFR ecological bulletins 1975 No. 20. International Meeting on Biological Productivity of Tundra, 5th: IBP Tundra Biome, Abisko, Sweden, April 16-24, 1974. Structure and function of tundra ecosystems, edited by T. Rosswall and O.W. Neal p. 61-72. Parinkina, O.M.; Chernov, I.U.I.

30-2198

Matveeva, N.V. et al., 1973:

Short review of vegetation types in the vicinity of the Taymyr biogeocenological station (Kratkii ocherk rastitel'nosti okrestnosti taimyrskogo biogeotsenologicheskogo statsionara). Biogeotsenozy Taimyrskoi tundry i ikh produktivnost'. Vyp. 2 (Biogeocenoses of Taymyr tundra and their productivity. Vol. 2). Leningrad, Nauka, 1973, p. 7-49. In Russian with English summary. 46 refs. Polozova, T.G., Blagodatskikh, L.S., Dorogostaiskaia, E.V.

Matveeva, N.V. et al., 1973

Tundra vegetation
Plant ecology
Mosses

28-4109

Matveeva, N.V., 1972:

Tareya word model. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra. Leningrad, USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm. tundra biome steering committee. April 1972 p. 156-162. 1 ref.

Tundra vegetation.
ecosystems.

27-2672

Medvedev, L.V. et al., 1973:

Microelements in the flood-plain landscapes of the middle course of the Ob' River (Mikroelementy v poimennykh landshaftakh srednego techeniia reki Obi). Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Nauchnye doklady vysshei shkoly. Biologicheskie nauki, 1973, No. 7, p. 118-124. In Russian. 10 refs. Belitsina, G.D.

Taiga soils
Soil profiles
Taiga vegetation

28-2716

Medvedeva, N.S., 1972:

Fructification in larch forests of northern Yakutia (Listvennichnye lesa Severnoi Iakutii i plodonoshenie v nikh) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 204-207. In Russian with English summary. 2 refs.

30-697

Mel'nikov, P.I. et al., 1973:

Geocryological conditions and methods of laying the main pipeline Noril'sk-Messoiakha (Geokriologicheskie usloviia i sposoby prokladki magistral'noqo truboprovoda Noril'sk-Messoiakha). International Conference on Permafrost, 2nd, Yakutsk, 1973 1973 Vol. 7, p. 133-142. In Russian. 4 refs. Bakulin, F.G., Karpov, E.G., Kolesov, A.A.

Tundra terrain.
Tundra soils.

28-1174

Mel'nikov, P.I., 1975:

Objectives and trends of research on preservation of northern environments (Problemy i napravleniia issledovaniia v oblasti okhrany okruzhaiushchei sredy Severa) Interantional Conference on Permafrost, 2nd, Yakutsk, 1973 1975 Vol.8. p/ 188-200. In Russian. Tolstikhin, O.N.

30-1519

Melnikov, P.I., 1975:
Permafrost at the territory of the USSR. XXIII International Geographical Congress. Symposium: Geography of Polar Countries. Tour K-29, Leningrad, July 22-26, 1976. Extended summaries. Leningrad, Hydrometeorological Publishing House, p. 24-25.

BROWN

Messick, C., 1971:
Pipeline construction cold regions (the Russian literature). A bibliography. U.S. Dept. of the Interior. Bibliography series, May 1971, No. 23, 126 p. Russian titles are accompanied by English translations.

Bibliographies.

28-1357

Mezhennyi, A.A., 1971:
Biology of the Kaiander larch at its northern line in the Omoloi River valley (K biologii listvennitsy Kaiandera na ee severnom predele v doline reki Omoloi). Akademiia nauk SSSR. Dal'nevostochnyi tsentr. Severo-vostochnyi kompleksnyi institut. Trudy, 1971, Vol. 42, p. 198-212. In Russian. 9 refs.

Tundra vegetation
Plant ecology
Tundra soils

26-1846

Mezhennyi, A.A., 1972:
Complex mapping of tundra biotopes (scale 1:200) for biogeocenological purposes (Opyt kompleksnogo kartografirovaniia tundrovnykh biotopov (v mashtabe 1:200) dlia biogeotsenologicheskikh tselei) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p.160-165. In Russian with English summary. 2 refs. Antropova, G.L. 30-693

Mikhailov, I.S., 1973:
Soil structure in the arctic zone (Struktura pochvennogo pokrova arkticheskoi zony) Moscow. Pochvennyi institut imeni V.V. Dokuchaeva. Struktura pochvennogo pokrova i metody ee izucheniia (Soil structure and methods of studying it) Moscow, p. 119-125. In Russian. 6 refs.

29-3238

Mikhaleva, V.M., 1971:
Establishing vegetation on cut-over areas in southwest Yakutia (Vosstanovlenie rastitel'nosti na vyrubakh v iugo-zapadnoi IAKutii) Respublikanskoe soveshchanie po okhrane prirody IAKutii, 5th, Irkutsk, 1971. Okhrana prirody IAKutii (Conservation in Yakutia) Irkutsk, Vostochno-Sibirskoe knizhnoe izd-vo, p. 65-75. 4 refs. In Russian. Chugunova, R.V.

29-3804

Mikhailov, N.A., 1976:
Methods of studying the evolution of permafrost conditions in the southern permafrost conditions in the southern permafrost zone and the basic principles of local landscape restoration (e.g. construction of the Baikal-Amur Railroad). Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 68-69.

BROWN

Mikhailova, R.P., 1970:
Description of organic matter of mountain-Taiga soils in the northern part of the central Urals. Soviet soil science. Nov.-Dec. 1970 No. 6. p. 693-702. Translated from Pochvovedenie. 44 refs.

Mountain soils.
Taiga soils.

26-243

Mikhailovskii, V.V., 1976:
Environmental protection during gasoline construction in the Far North. Symposium on Environmental Protection in Relation to Economic Development of permafrost Regions. CRREL TL 518, p. 50-52.

BROWN

Mishchenko, Z.A., 1971:
Charting the temperatures of active surfaces with morphometric relief characteristics. Kartirovanie temperatury delatel'noi poverkhnosti s ispol'zovaniem morfometricheskikh kharakteristik rel'efa. Klimat pochvi. (Soil climate. Proceedings of the Conference of the Scientific Council on the Study of Climatic and Agroclimatic Resources. Nov., 1969). Leningrad, Gidrometeoizdat, 1971, p. 52-64. In Russian. 20 refs. S600.M55

Soil temperature.
Active layer.

27-1031

Mishukov, N.P., 1972:

Fruiting of Siberian cedar in northern taiga (Plodonoshenie kedra sibirskogo v podzone severnoi taigi). Akademiia nauk SSSR. Sibirskoe otdelenie. Izvestiia. Seriia biologicheskikh nauk, Dec. 1972 15(3), p. 53-59. In Russian with English summary. 8 refs.

Taiga terrain.
Taiga vegetation.
Plant ecology.

28-414

Miskina, L.V., 1973:

Effect of geomorphological structure on swamp development in the Arkhara plain (Protsessy Zaboichivaniia Arkharinskoi nizmennosti v sviazi s ee geomorfologicheskimi stroeniami). Prirodnye osobennosti bolot Priamur'ia (Natural characteristics of swamps in the Amur River area). Novosibirsk, Nauka, 1973, p. 70-77. In Russian. 4 refs.

Vegetation
Plant ecology

28-3483

Moriakina, V.A., 1970:

History and basic stages of woody plant introduction in Tomsk. Istoriia i osnovnye etapy introduktsii drevesnykh rastenii v Tomske. Tomsk. Sibirskii botanicheskii sad. Biulleten', 1970, Vol. 7, p. 3-18. In Russian. 26 refs.

Vegetation.
Plant ecology.
USSR--Tomsk.

27-586

Moriakina, V.A., 1970:

Vegetation period of trees and shrubs introduced in Tomsk. Prodolzhitel'nost' perioda vegetatsii drevesnykh i kustarnikovykh introdutsentov v Tomske. Tomsk. Sibirskii botanicheskii sad. Biulleten', 1970 Vol. 7, p. 33-46. In Russian. 5 refs.

Vegetation.
Plant ecology.
USSR--Tomsk.

27-587

Moskalenko, N.G., 1975:

Reestablishing vegetational covers on northern routes of linear structures in northern west Siberia (Osobennosti protsessa vosstanovleniia rastitel'nogo pokrova na trassakh lineinykh sooruzhenii Severa Zapadnoi Sibiri) Geograficheskoe obshchestvo SSSR. Izvestiia Jan.-Feb. 1975 107(1) p. 62-67. In Russian. 6 refs. English translation is 30-3662.

29-3118

Moskalenko, N.G., 1976:

Specific features in plant recovery along the routes of linear structures in northwestern Siberia. U.S. Army Cold Regions Research and Engineering Laboratory May 1976. 8 p. For Russian original see 29-3118. 6 refs.

30-3662

Moskalenko, N.G., 1976:

Typical disturbances of natural environments in northern West Siberia caused by pipeline construction and the possibilities of resotation. Symposium on Environmental Protection in Relation to Economic Development of Permafrost REgions. CRREL TL 518, p. 53-54.

BROWN

Murmansk Region Vegetation, 1972:

(Flora i rastitel'nost' Murmanskoi oblasti) Leningrad, Nauka, 131 p. In Russian. Refs.

29-1404

Nakhutsrishvili, G.Sh., 1974:

Ecology of alpine vegetation. State of the art (Sovremennoe sostoianie ekologicheskikh issledovaniia rastitel'nosti vysokogorii) Botanicheskii zhurnal May 1974 59(5) p. 731-741 In Russian. Refs. p. 739-741.

29-1296

Nakhutsrishvili, G.Sh., 1971:

Photosynthesis of high-mountain plants in central Caucasus (O fotosinteze vysokogornyykh rastenii tsentral'nogo Kavkaza Zimoi). Akademiia nauk Gruzinskoi SSSR. Soobshcheniia, Nov. 1971, 64(2), p. 417-419. In Russian with English and Georgian summaries. 10 refs.

Mountain soils
Alpine vegetation
Plant ecology
Photosynthesis

26-2766

National Research Council, Canada, 1971:
Proceedings of a seminar on the permafrost active layer, 4 and 5 May 1971. National Research Council, Canada. Associate Committee on Geotechnical Research. Technical memorandum. Dec. 1971. No. 103. 63 p.

Active layer.

27-2643

Natural characteristics of swamps in the Amur River area (Prirodnye osobennosti bolot Priamur'ia). Novosibirsk, Nauka, 1973, 199 p. In Russian. Numerous references.

Peat
Soil formation
Vegetation

28-3480

Naumov, E.M., 1972:
Main types of genetic soil profiles and peculiarities of taiga soils in the far northeast (Glavnye tipy geneticheskikh pochvennykh profilei i osobennosti pochvennogo pokrova taezhnoi zony Krainego Severo-Vostoka) Vsesoiuznyi simpozium po biologicheskii problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 48-55. In Russian with English summary. 8 refs.

30-678

Naumov, E.M., 1972:
Migration of matter in soils of the far northeast (Osobennosti migratsii veshchestv v pochvakh Krainego Severo-Vostoka) Vsesoiuznyi simpozium po biologicheskii problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 67-74. In Russian with English summary. 11 refs. Tsiurupa, I.G.; Naumova, M.A.

30-681

Naumov, E.M., 1974:
Mountain-taiga differentiated soils of the continental regions in the far north east (Gorno-taezhnye differentsirovannye pochvy kontinental'nykh raionov Krainego Severo-Vostoka) Biologicheskie Problemy Severa, VI simpozium; Vypusk 6 (Biological Problems of the North, 6th symposium; Vol. 6) Yakutsk, Akademiia nauk SSSR, p. 21-26. In Russian.

29-1065

Naumov, E.M., 1974:
Peculiar features of the taiga soil formation in the extreme north-east of Eurasia. Moscow, "Kolos" Publishing House, 1974.

BROWN

Naumov, E.M., 1973:
Permafrost effect on soil cover and soil profile (Vliianie kriogeneza na pochvennyi pokrov i pochvennyi profil'). International Conference on Permafrost, 2nd, Yakutsk, 1973, Vol. 3, p. 79-82. In Russian. 9 refs.

Plant ecology.
Subarctic soils.
Soil profiles.

28-1072

Naumov, E.M., 1971:
Soils of the Magadan region and their agrochemical characteristics (Pochvy Magadanskoi oblasti i ikh agrokhimicheskaia kharakteristika). Agrokhimicheskaia kharakteristika pochv SSSR. Dal'nii Vostok. Moscow, Nauka, 1971, p. 240-312. In Russian. 84 refs.

Arctic soils
Tundra soils
Tundra vegetation
USSR--Kolyma

26-3822

Nechaeva, E.G., 1973:
Alpine forest soils of the southern Maritime Territory. In Problemy Lesnogo Pochvovedeniia, p. 151-167. In Russian.

NAL/CAIN (Lockheed)

Neishtadt, M.I., 1971:
Natural phenomenon - the west Siberian swamps (mirovoi prirodnyi fenomen - zabolochennost' Zapadno-Sibirskoi ravniny). Akademiia nauk SSSR. Izvestiia. Seriiia geograficheskaiia. Jan.-Feb 1971 No.1 P. 21-34. In Russian. 16 refs.

Taiga.
Forest tundra.
Tundra soils.

26-86

Neishtadt, M.I., 1972:

Natural world phenomenon -- waterlogging of the west Siberian plain. Soviet hydrology: selected papers 1971 (Publ. Dec. 1972) No. 1, p. 80-90. Translated from Akademiia nauk SSSR. Izvestiia. Seriya geograficheskaja, No. 1, 1971. 16 refs.

Taiga soils.
Taiga vegetation.

25-25

Nepomiluev, V.F. et al., 1971:

Microflora of northern soils formed on carbonate and on carbonate-deficient deposits. (Mikroflora severnykh pochv, obrazovavshikhsia na karbonatnykh i beskarbonatnykh otlozheniakh) Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Nauchnye doklady vysshei shkoly. Biologicheskie nauki 1971 No. 2 p. 108-114. In Russian. 12 refs. Kozyrev, M.A.

Taiga vegetation.
Taiga soils.

26-1460

Nepromilueva, N.E., 1972:

Renewal of Siberian cedar in Komi ASSR (Vozobnovlenie kedra sibirskogo v Komi ASSR). Akademiia nauk SSSR. Vsesoiuznoi botanicheskoe obshchestvo. Kedr sibirskii na evropeiskom severe SSSR ego rasprostranenie, vozobnovlenie i kul'tura. Leningrad, Nauka, 1972, p. 20-28. In Russian, 3 refs.

Taiga vegetation.
Taiga soils.
USSR--Komi ASSR

28-130

Nesmelova, E.I., 1975:

Thermal regime of soils in north Siberia (Teplovoi rezhim pochvogruntov na severe Sibiri) Moscow. Universitet. Vestnik. Seriya 5 Geografiia Nov.-Dec. 1975 No.6 p. 65-71. In Russian with English summary.

30-3190

Netrebov, V.P., 1974:

Cultivation of perennial grasses in the continental zone of the Magadan Region (Vozdelyvanie mnogoletnikh trav v kontinental'noi zone Magadanskoi oblasti) Biologicheskie problemy Severa, VI simpozium, Vypusk 4 (Biological problems of the North, 6th symposium, Vol. 4) Yakutsk, Akademiia nauk SSSR, p. 96-100. In Russian.

29-2667

Nifontova, M.G., 1972:

Diurnal dynamics of carbon dioxide assimilation in some lichens in forest tundras east of the Urals. Sutochaniia dinamika assimiliatsii CO₂ u nekotorykh lichainikov lesotundry Zaural'ia. Ekologiya, 1972, No. 2. p. 88-90. In Russian. 16 refs.

Tundra vegetation
Forest Tundra.
Tundra soils.

27-1694

Nifontova, M.G., 1972:

Diurnal dynamics of carbon dioxide assimilation in some lichens of the transural forest tundra. Soviet journal of ecology, March-April 1972 (Publ. Jan. 1973) 3(2), p. 164-166. Translated from Ekologiya. For Russian original see 27-1694. 16 refs.

Tundra soils.
Tundra vegetation.
Forest tundra.

28-349

Nifontova, M.G., 1971:

Procedure for determining photosynthetic productivity of the leaves of arctic alpina and betula nana in forest tundra (K setodike opredeleniia fotosinteticheskoi moshchnosti list'ev tolokianuki i arkticheskoi berezki v usloviakh lestoundry) Ekologiya 1971 No. 1. p. 109-110. In Russian. 3 refs.

Forest tundra.
Tundra soils.
Tundra vegetation.

26-1052

Nikitin, E.D., 1971:

Effect of bedrock on soil formation in the taiga forests on the right bank of the Ob' River. O vliianii materianskikh porod na pochvoobrazovanie v taezhno-lesnom pravobrezh'e Oki. Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Nauchnye doklady vysshei shkoly. Biologicheskie nauka, 1971 No. 12, p. 100-104. In Russian. 13 refs.

Taiga soils.
Soil formation.
Taiga vegetation.

27-554

Nikitin, E.D., 1975:

Effect of topsoil moisture on forming of sandy soils of the Ket'timskii area of the Ob' region. Nauch Dokl Vyssh Shk, Biol Nauk, 5: 117-121. In Russian.

NAL/CAIN

Nikitin, E.D., 1971:

On the influence of matrix on soil formation in taiga forest of the Ob River right-bank. Nauch Dokl Vysshei Shkoly Biol Nauk, 12: 100-104. In Russian.

NAL/CAIN

Nikitin, E.D., 1975:

Soil and geographic zonality in the central west Siberia taiga (O pochvenno-geograficheskoi zonal'nosti v taezhnykh raionakh tsentra Zapadnoi Sibiri) Moscow. Universitet. Vestnik. Seriya 6 Biologiya i Pochvovedenie Mar.-Apr. 1975 No.2 p. 101-106. In Russian with English summary. 22 refs.

30-330

Nikitina, Z.I. et al., 1970:

Microorganism distribution in Taiga geosystems. Raspredelenie mikroorganizmov v taezhnykh geosistemakh. Akademiya nauk SSSR. Sibirskoe otdelenie. Institut geografii Sibiri i Dal'nego Vostoka. Doklady 1970 Vol. 28, p. 17-24. In Russian. 6 refs. Antonenko, A.M. Stanikova, G.A.

Taiga.

27-1819

Nishchakov, A.F., 1973:

Outlook for the creation of preserves and conservation of natural features in the alpine regions of the Kuznets Basin. In Okhrana Gornyykh Landshaftov Sibiri p. 209-215. In Russian. Khatuntsev, D.I.

NAL/CAIN

(Lockheed)

Nizametdinova, I.A.F., 1971:

Microflora of alpine soils on the western spurs of the Chatkalskiy Range (Mikroflora poch v vysotnykh poiasov zapadnykh otrogov Chatkal'skogo khrebt) Voprosy dinamicheskogo pochvoobrazovaniia (Problems of dynamic soil formation) Tashkent, p. 143-163. In Russian. 12 refs. Dadabaeva, D.; Pattakhov, N.

29-514

Norin, B.N., 1975:

Ary-Mas, USSR. Sweden. Statens naturvetenskapliga forskningsrad. NFR ecological bulletins 1975 No.20 International Meeting on Biological Productivity of Tundra, 5th: IBP Tundra Biome, Abisko, Sweden, April 16-24, 1974. Structure and function of tundra ecosystems, edited by T. Rosswall and O.W. Heal p. 183-191. 13 refs. Ignatenko, I.V.

30-2203

Norin, B.N., 1974:

Interrelations of forest and tundra ecosystems (Nekotorye problemy izucheniia vzaimootnosheniia lesnykh i tundrovyykh ekosistem) Botanicheskii zhurnal Sept. 1974 No. 9 p. 1254-1268 In Russian. Refs. p. 1266-1268.

29-1052

Norin, B.N., 1972:

Light forest at the northern forest line and methods of its investigation (Redkoles'ia severnoi granitsy i metodika ikh izucheniia). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972 p. 65-69. In Russian. 18 refs.

Tundra vegetation.
Forest tundra.
Plant ecology.

28-1257

Norin, E.N., 1972:

Main ecological surveys at the station ARY-MAS. International biological programme, tundra biome; Proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 133-139. 3 refs.

Tundra.
USSR-ARY-MAS.

27-2669

Norin, B.N. et al., 1971:

Vegetation and soils of the Ary-Mas forests (Taymyr) (Rastitel'nost' i pochvy lesnogo massiva Ary-Mas (Taimyr)). Botanicheskii zhurnal, Sept. 1971, 56(9), p. 1272-1283. In Russian with English summary. 2 refs. Ignatenko, I.V., Knorre, A.V., Lovelius, N.V.

Tundra
Plant ecology
Forest Tundra

26-2514

Novichkova-Ivanova, L.N., 1972:

Soil and aerial algae of polar deserts and arctic tundra. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee. April 1972. p. 261-265. 10 refs.

Deserts.

27-2689

Novichkova-Ivanova, L.N. et al., 1972:

Studying synusia of soil algae in tundras (K izucheniiu sinuzii pochvennykh vodoroslei tundr). Izucheniye biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 73-79. In Russian. 29 refs. Sdobnikova, N.V.

Tundra soils.
Soil moisture.
Photosynthesis.

28-1260

Novikov, F.IA., 1973:

Moisture transfer in thawing clays (Vlagoperenos v ottaivaiushchikh glinistykh gruntakh). International Conference on Permafrost, 2nd, Yakutsk, 1973 1973 Vol. 1, p. 85-91. In Russian. 2 refs.

Clay soils.
Soil moisture migration.

28-1027

Nukhimovskaia, UY.D., 1974:

Life forms of Siberia fir in the Altai highlands (O zhiznennykh formakh pikhty sibirskoi na vysokogor'iakh Altaia). Moscow. Universitet. Vestnik. Seriya 6, Biologiya i pochvovedenie, Jan.-Feb. 1974, No. 1, p. 44-49. In Russian with English summary. 18 refs.

Alpine vegetation
Plant ecology
Alpine soils

28-4307

Openlender, I.V., 1973:

Uniformity of the amount of mobile forms of micronutrients in soils of alpine pastures of Kirghizia. Khim Sel'sk Khoz 11(12): 60-62. In Russian. Odol'ko, E.I.; Beisheeva, B.

NAL/CAIN

(Lockheed)

Orlov, A.D., 1971:

Water erosion of soil in the Novosibirsk portion of the Ob' river valley. Vodnaia eroziia pochv Novosibirskogo Priob'ia. In Russian with English table of contents enclosed. Novosibirsk, Nauka, 1971. 175p. Ref. p. 168-174. Akademiia nauk SSSR. Sibirskoe otdelenie. Institut pochvovedeniia i agrokhimii.

Soils.
USSR-Novosibirsk.

27-2886

Orlov, A.IA., 1974:

Types of forest biogeocoenoses in southern taiga (Tipy lesnykh biogeotsenozov iuzhnoi taigi) Moscow, Nauka, 231 p. In Russian with English table of contents enclosed. Refs. p. 226-230. Koshel'kov, S.P.; Osipov, V.V.; Sokolov, A.A.;

29-1446

Orlov, E.D., 1974:

Reforestation on drained transitional and high bogs in central taiga (K obosnovaniyu lesovosstanovleniia na osushennykh perekhodnykh i verkhovykh bolotakh srednei podzony taigi) Puti izucheniia i osvoeniia bolot severo-zapada evropeiskoi chasti SSSR (Study and reclamation of swamps in the NW European USSR) Leningrad, Nauka, p. 157-167. In Russian. 20 refs.

29-1888

Orlov, V.I., 1973:

Dynamics of natural processes in northern regions and the means of improvement and preservation of natural environments in northern west Siberia (Dinamika prirody severnykh raionov i mery po okhrane i uluchsheniiu prirodnoi sredy (na primere Severa Zapadnoi Sibiri). Problemy severa, 1973, Vol. 18, p. 64-79. In Russian. 23 refs.

Geobotanical interpretation
Vegetation
Plant ecology

28-3744

Ovchinnikov, S.M., 1973:

Clay minerals in loamy soils of taiga and forest tundra of western Siberia. Pochvovedenie 12: 90-103. In Russian. English summary. Sokolova, T.A.; Targul'ian, V.O.

NAL/CAIN

(Lockheed)

Pachevskii, T.M., 1972:

State of current bibliographic information on biological problems of the north (Sostoianie tekushchei bibliograficheskoi informatsii po biologicheskim problemam Severa) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitelnost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 369-372. In Russian with English summary.

30-711

Pak, K.P., 1970:

Soil-meliorative characteristics of the north-east of Saprinsky lowland and Big Tzaryn Firth. Pochvovedenie, 9: 99-107. In Russian. English summary.

NAL/CAIN

Pak, K.P., 1972:

Soil-reclamative characteristics of Sarpinsky lowland. (USSR) Pochvovedenie, 6: 107-117. In Russian. English summary. Pustovoirov, N.D.

NAL/CAIN

Pak, V.A., 1974:

Accelerated development of tundra lands for forage crops (Uskorennoe osvonenie tundrovnykh zemel' pod kormovye kul'tury) Biologicheskii problemi Severa, VI simpozium; Vypusk 6 (Biological Problems of the North, 6th symposium; Vol. 6) Yakutsk, Akademiia nauk SSSR, p. 147-152. In Russian. Denison, G.V.

29-1075

Panasenko, I.N., 1975:

Micro-heterogeneity of tundra soils in northwestern Chukotka (O mikrokompleksnosti tundrovnykh pochv Severo-Zapada Chukotki) Vsesoiuznaia konferentsiia Pochvennyi kriogenez i melioratsiia merzlotnykh i kholodnykh pochv. Pushchino, Oct., 1975, Materialy Moscow, Nauka, p. 61-64. In Russian. 3 refs.

30-4231

Panfilov, V.P., ed., 1971:

Soil physics of Western Siberia (Fizika pochv Zapadnoi Sibiri). Novosibirsk, Nauka, 1971, 139 p. In Russian with English summary. Refs. Kovalev, R.V., ed.

Soil profiles.

28-53

Panov, L. K., 1973:

Systems of settlement planning and the preservation of natural environments in the north (Sistemy rasseleniia i okhrana prirodnoi sredy na Severe). Problemy severa, 1973, Vol. 18, p. 159-169. In Russian.

Subarctic soils
Subarctic vegetation

28-3754

Parinkina, O.M., 1972:

Biologic activity of West Taymyr soils (O biologicheskoi aktivnosti pochv Zapadnogo Taymyra). Vsesoiuznaia akademiia sel'skokhoziaistvennykh nauk. Tsentral'nyi muzei pochvovedeniia. Sbornik trudov, 1972, Vol. 5. Geografiia, genezis i plodorodie pochv (Geography, formation and fertility of soils), p. 258-270. In Russian. 28 refs.

Arctic soils.
Arctic vegetation.
Plant ecology.

28-368

Parinkina, O.M., 1973:

Biological productivity of bacterial communities in tundra soils (Biologicheskaiia produktivnost' bakterial'nykh soobshchestv tundrovnykh pochv). Biogeotsenozy Taymyrskoi tundry i ikh produktivnost'. Vyp. 2 (Biogeocenoses of Taymyr tundra and their productivity. Vol. 2). Leningrad, Nauka, 1973, p. 58-76. In Russian with English summary. 20 refs.

Tundra soils
Soil formation
Tundra vegetation

28-4111

Parinkina, O.M., 1971:

Microbiological characteristics of certain west Taymyr soils (K mikrobiologicheskoi kharakteristike nekotorykh pochv zapadnogo Taymyra) Biogeotsenozy Taymyrskoi tundry i ikh produktivnost' (Biogeocenoses of Taymyr tundra and their productivity) Leningrad, Nauka, p. 108-115. In Russian with English summary. 26 refs.

27-1544

Parinkina, O.M., 1973:

Variations in microbial landscape due to changes in soil and botanical conditions in some soils of the Taymyr peninsula (Izmenenie kharaktera mikrobnogo peizazha pri smene pochvenno-botanicheskikh uslovii v nekotorykh pochvakh p-ova Taymyr). Biogeotsenozy Taymyrskoi tundry i ikh produktivnost'. Vyp. 2 (Biogeocenoses of Taymyr tundra and their productivity. Vol. 2). Leningrad, Nauka, 1973, p. 77-82. In Russian with English summary. 16 refs.

Parinkina, O.M., 1973

Tundra soils
Soil formation
Soil profiles

28-4112

Parmuzin, I.U.P., 1972:

Dynamics of permafrost, soil erosion and thermokarst (Izuchenie dinamiki mnogoletnei merzloty gruntov, erozii, termokarsta). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 32-37. In Russian. 5 refs.

Thermokarst.
Active layer thickness.
Vegetation factors.

28-1249

Parmuzin, I.U.P., 1973:

Paleoglacial forms imitated by recent relief-forming processes in the Siberian forest tundra (Imitatsiia drevnelednikovyykh form sovremennymi rel'efobrazuiushchimi protsessami v tundroles'iakh Sibiri). Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Izvestiia vysshikh uchebnykh zavedenii. Geologiya i razvedka. June, 1973, No. 6, p. 13-23. In Russian. 17 refs.

Taiga terrain.
Forest tundra.
Cryogenic processes

28-1275

Parmuzin, I.U.P., 1972:

Relief-forming processes and zonality in forest-tundra biogeocenoses (Rel'efobrazuiushchie protsessy i zonal'nost' biogeotsenozov tundroles'ia) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 12-16. In Russian with English summary. 14 refs.

30-673

Pavlov, A.V., 1973:

Thermal cycle in the active layer of soil (Krugoborot tepla v deiatel'nom sloe pochvy). International Conference on Permafrost, 2nd, Yakutsk, 1973 1973 Vol. 1, p. 41-50. In Russian.

Active layer.

28-1019

Pavlov, A.V., 1973:

Variations in thermal characteristics of the surface layer of ground (Izmenchivost' teplogizicheskikh kharakteristik). Problemy geokriologii (Problems in geocryology). Novosibirsk, Nauka, 1973, p. 64-69. In Russian.

Active layer thickness.

28-1376

Pavlova, T.S., 1970:

Studying mineral-elements transfer between vegetational cover, coniferous needles and soil in two types of cedar forest in northern Urals (Izuchenie obmena mineral'nykh elementov mezhdurastitel'nym pokrovom, khvoei i pochvoi v dvukh tipakh kedrovyykh lesov Severnogo Urala). Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy, 1970, Vol. 76, p. 58-65. In Russian. 13 refs.

Pavlova, T.S., 1970

Mountain soils
Forest soils
Vegetation
USSR--Ural Mountains

26-1869

Pavlova, N.N., 1971:

Typical morphological landscape structures in the central taiga of the Russkaia ravnina (Tipologiya morfologicheskikh struktur landshaftov podzony srednei taigi Russkoi ravniny). Leningrad. Universitet. Uchenye zapiski. Seriya geograficheskikh nauk, 1971, 21(358). In Russian. 7 refs.

Taiga soils.
Taiga vegetation.
Plant ecology.

28-506

Pavlova, E.B., 1971:

Vegetal mass of the tundras of western Taymyr. International Tundra biome. translation April 1971 No. 3. 5p. Translated from Vestnik Moskovskogo. Universiteta, No. 5: 62-67, 1969. 4 refs.

Tundra vegetation.
Tundra soils.
Lichens.

26-658

Pen'kovskaia, E. F., 1973:

Phytocenotic characteristics and seasonal change in certain floral associations in the Novosibirsk reservoir region (Fitotsenoticheskie osobennosti i sezonnaia izmenchivost' nekotorykh rastitel'nykh assotsiatsii v raione Novosibirskogo vodokhranil'shcha Rastitel'nost' Priob'ia i ee khoziaistvennoe ispol'zovanie lesostepnykh raionov Priob'ia. Novosibirsk, Nauka, 1973, p. 98-147. In Russian. 2 refs.

2

Pen'kovskaia, E. F., 1973

Vegetation patterns
Forest ecosystems
Forest soils

28-1932

Pen'kovskaia, E.F., 1973:

Synopsis of the flora of the environs of Akademgorodok (Novosibirsk Region). In Novosti Geografii i Sistematiki Rasteni Sibiri, p. 30-88. In Russian.

NAL/CAIN

Pereverzev, V.N., 1970:

Soil biology and nitrogen regime of peat bogs in conditions of the Far North (Biologicheskaya aktivnost' i azotnyi rezhim torfiano-bolotnykh pochv v usloviakh krainego severa) Leningrad, "Nauka" Leningradskoe Otd-Nie, 97, (1) p. In Russian. Golovko, E.A.; Alekseeva, N.S.

NAL/CAIN

Pereverzev, V.N., 1970:

Transformation of mineral nitrogen in peat soils in the far north. (Prevrashchenie mineral'nogo azota v torfianoi pochve v usloviakh krainego Severa) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 162-167. In Russian.

Cryogenic soils.
Soil formation.

26-1718

Perfil'eva, V.I., 1975:

Arctic tundra in the Chukoch'ya estuary (Arkticheskaya tundra v ust'e reki Chukoch'ei) Botanicheskie issledovaniia v Iakutii Yakutsk, Iakutskii filial SO AN SSSR, 1975 p. 52-60 In Russian. 7 refs. Rykova, IU.V.

30-3274

Permafrost and Soil III: Genesis, geography and classification of frozen soils. 267 p. Collected papers in Russian with English summaries. Yakutsk, 1974.

BROWN

Permiakova, A.A., 1972:

Fragments of steppe vegetation in the central Kolyma district (Fragmenty stepnoi rastitel'nosti v srednekolym'skom raione) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 141-147. In Russian with English summary. 18 refs.

30-692

Petrov, F.S. et al., 1973:

Thermal regime of supersaturated soils in the lower Amur River plains (Temperaturnyi rezhim pereuvlazhnennykh pochv Nizhneamurskikh nizmennostei). Prirodnye osobennosti bolot Priamur'ia (Natural characteristics of swamps in the Amur River area). Novosibirsk, Nauka, 1973, p. 113-122. In Russian. 6 refs. Prozorov, IU.S.

Active layer
Soil temperature

28-3488

Petrov, M.F., 1972:

Cedar cultivation in Karelskaya ASSR (Kul'tury kedra sibirskogo v Karel'skoi ASSR). Akademiia nauk SSSR. Vsesoiuznoi botanicheskoe obshchestvo. Kedr sibirskii na evropeiskom severe SSSR ego rasprostranenie, vozobnovlenie i kul'tura. Leningrad, Nauka, 1972, p. 53-58. In Russian, 7 refs.

Forest soils.
Plant ecology.

28-131

Petrovskaya-Baranova, T.P., 1971:

Chloroplast morphology and photosynthesis beneath the snow (Morfologiya khloroplastov i fotosintez pod snegom). Moscow. Glavnyi botanicheskii sad. Biulleten' 1971, Vol. 82, p. 52-58. In Russian. 31 refs.

Arctic soils
Arctic vegetation
Photosynthesis

26-3697

Petrovskii, V.V., 1971:

Floristic finds on Wrangel Island (Floristicheskie nakhodki na ostrove Vrangelia) Botanicheskii zhurnal. May 1971. 56(5) p. 677-684. In Russian. 15 refs.

Arctic soils.
Arctic vegetation.
USSR-Wrangel Island.

26-461

Petrovskii, V.V., 1975:

Interesting floristic finds in western Chukotka. Bot Zh, 60(11): 1640-1650. In Russian. Koroleva, T.M.

NAL/CAIN

Petrovskii, V.V., 1972:

List of vascular plants growing on Wrangel Island. Spisok sosudistykh rastenii o. vrangelia. Botanicheskii zhurnal Jan. 1972 58(1). p. 113-126. In Russian. 7 refs.

Arctic vegetation.
Plant Ecology.
USSR-Wrangel Island.

27-2051

Piastolova, O.A., 1972:

Role of rodents in the energetics of biogeocenoses of forest-tundra and southern tundra. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, Tundra biome steering committee, April 1972. p. 128-130.

Forest tundra.
Plants (Botany).

27-2667

P'iavchenko, N.I., 1972:

Dynamics of swamp biogeocenoses under northern conditions (Dianmika bolotnykh biogeotsenozov v usloviiakh Severa) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 6-11. In Russian with English summary. 7 refs.

30-672

P'iavchenko, N.I., 1970:

Investigation of swamp biocenoses. Akad Nauk SSSR Izv Ser Biol, 4: 553-561. In Russian. English summary. Nitsenko, A.A.; Boch, M.S.

NAL/CAIN

P'iavchenko, N.I. et al., 1973:

Land reclamation in Karelian swamps (Perspektivy osvoeniia bolot Karelii). Problemy severa, 1973, Vol. 18, p. 100-106. In Russian. 6 refs. Kozlova, R.P., Elina, G.A.

Peat
USSR--Karelia

28-3747

P'iavchenko, N.I., 1972:

The main principles of mire biogeocenosis investigations (Osnovnye printsipy Izu-cheniia bolotnykh biogeotsenozov) Leningrad, "Nauka" Leningradskoe Otdlenie, 118 p. In Russian.

NAL/CAIN

P'iavchenko, N.I., 1974:

Means of studying and reclaiming bogs in northwestern European USSR (Puti izu-cheniia i osvoeniia bolot severo-zapada Evropeiskoi chasti SSSR) Leningrad, "Nauka", 195 p. In Russian. English table of contents.

NAL/CAIN

P'iavchenko, N.I., 1970:

On the forestial importance of the swampy lands in the taiga zone. Lesovednie, 2: 18-23. In Russian. English summary.

NAL/CAIN

P'iavchenko, N.I., 1974:

Soil as a component of biogeocenosis (ecosystem) (Pochva kak komponent biogeotsenoz (ekosistemy)) International Congress of Soil Sciences, 10th, Moscow. Pochvennye issledovaniia v Karelii (Soil studies in Karelia) Petrozavodsk, p. 6-11. 6 refs. In Russian with English summary. Kozlovskaja, L.S.

29-3762

Pitkin, A.I., 1972:

Alpine meadow-picea forests of the Carpathians. Lesovod Agrolesoneliior, 31: 65-72. In Russian.

NAL/CAIN

Pivovarova, Zh.F. et al., 1973:

Algae and protofauna of chestnut soils in the Issyk-Kul' and At-Bashi basins in Tien Shan (Al'goflora i protofauna kashtanovykh pochv Issyk-Kul'skoi i At-Bashinskoi kotlovin Tian'-Shania). Akademiia nauk SSSR. Sibirskoe otdelenie. Izvestiia Dec. 1973, No. 15, p. 57-63. In Russian with English summary. 5 refs. Platova, G.D.

Alpine soils
USSR--Tien Shan

28-4212

Polozova, T.G., 1971:

Vascular plants in the Taymyr Research Station area (along the right bank of the Pyasina River, mouth of Tareya, west Taymyr) Sosudistye rasteniia raiona Taymyrskogo Statsionara (pravoberezh'e Piasiny bliz ust'ua Tarei, zapadniy Taymyt) Biogeotsenozy Taymyrskoi tundry i ikh produktivnost' (Biogeocenoses of Taymyr tundra and their productivity) Lenin-grad, Nauka, p. 161-184. In Russian with English summary. 6 refs.

27-1550

Popov, A.I., 1973:

Natural conditions in West Siberia, Vol. 4 (Prirodnye usloviia Zapadnoi Sibiri, Vypusk 4) Moscow, Universitet, 171 p. In Russian. Numerous refs.

29-1212

Popov, B.I., 1976:

Some principles of environmental protection during road construction in Central Yakutia. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 76-77.

BROWN

Popov, O. S., 1973:

Filtration coefficients of peat in raised bog and transitional mire of the central Amur River plain in west Siberia (O koeffitsientakh filtratsii torfianoi zalezhi verkhovykh i perekhodnykh bolot Sredneamurskoi nizmennosti i Zapadnoi Sibiri). Prirodnye osobennosti bolot Priamur'ia (Natural characteristics of swamps in the Amur River area). Novosibirsk, Nauka, 1973, p. 97-100. In Russian. 5 refs.

Peat

28-3486

Popov, O. S., 1973:

Runoff from the swamps located in the southern part of the central Amur River plain (Stok s bolot iuzhnoi chasti Sredneamurskoi nizmennosti). Prirodnye osobennosti bolot Priamur'ia (Natural characteristics of swamps in the Amur River area). Novosibirsk, Nauka, 1973, p. 101-112. In Russian. 10 refs.

Peat

28-3487

Popov, V.M., 1970:

Classification of strip-mined soils of Kuznetskii Basin according to their fitness for biological replanting. In Rekul'tivatsiia v Sibiri i na Urale, p. 25-41. In Russian. English summary. Ragim-zade, F.K.; Trofimov, S.S.

NAL/CAIN

Pospelova, E.B. et al., 1971:

Effect of vegetation on thermal regime of tundra soils in West Taymyr (O vliianii rastitel'nosti na temperaturnyi rezhim pochv v tundrakh Zapadnogo Taymyra). Moscow. Universitet. Vestnik. Seria 6. Biologiya i pochvovedenie. March-April. 1971. No. 2. p. 58-62. In Russian. 9 refs.. Zharkova, I.U.G.

Tundra vegetation.
Tundra soils.
Thermal regime.
USSR-Taymyr

26-133

Pospelova, E.B. et al., 1973:

Effect of vegetation on thermal regime of tundra soils in West Taymyr. U.S. Army Cold Regions Research and Engineering Laboratory, Aug. 1973, TL 378, 6 p. AD-766 593. For Russian text see 26-0133. 9 refs. Zharkova, I.U.G.

Soil temperature
Tundra soils
Vegetation factors

28-1661

Pospelova, E.B., 1972:

Flora in the overgrowing damaged areas of the Berelekh River valley in the Magadan region (K voprosu o flore zarastaiushchikh narushennykh uchastkov doliny reki Berelekh (Magadanskaia oblast')) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 180-184. In Russian with English summary. Tishkov, A.A.

30-695

Pospelova, E.B., 1972:

Plant cover and phytomass of the basic plant communities at the "Agapa" station (Rastitel'nykh pokrov i fiomassa osnovnykh rastitel'nykh soobshchestv statsionara "Agapa") Pochvy i produktivnost' rastitel'nykh soobshchestv. Vyp. 1 (Soils and productivity of plant communities. Vol. 1) Moscow, MGU, p. 55-79. In Russian. 17 refs. Zharkova, I.U.G.

27-1228

Pospelova, E.B., 1974:

Structure and biomass distribution in main vegetation associations at Agapa station (Struktura i prostranstvennoe raspredelenie rastitel'nykh soobshchestvakh statsionara "Agapa") Pochvy i produktivnost' rastitel'nykh soobshchestv. Vyp. 2 (Soils and productivity of plant associations. Vol. 2) Moscow, MGU, p. 48-66. 6 refs. In Russian.

29-3325

Pospelova, E.B., 1972:

Vegetation of the Agapa Station and productivity of the main plant communities. International biological programme, tundra biome; Proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 204-208.

Tundra vegetation.
Plants (Botany).
Biological productivity.

27-2680

Pospelova, E.B., 1971:

Yearly increment of phytomass in shrubs of the West Taymyr tundras (O godichnom priroste fitomassy nedotorykh kustarnikov v tundrach zapadnogo Taymyra) Moscow. Universitet. Vestnik. Seriya 6. Biologiya i pochvovedenie. May-June 1971 No. 3 p. 100-102. In Russian.

Tundra soils.
Tundra vegetation.
Biomass.

26-641

Pozdnyakov, L.K., 1975:

Productivity of forests of Siberia. Resources of the biosphere (synthesis of the Soviet studies for the International Biological Programme) Vol. 1. Leningrad, Nauka, p. 43-55.

BROWN

Priazhnikov, A.N., 1971:

Phytoncid productivity of vegetative components of cedar forests (Fitontsidnaia produktivnost' rastitel'nykh komponentov kedrovyykh lesov). Akademiia nauk SSSR. Sibirskoe otdelenie. Biologicheskii institut. Trudy po lesnomu khozhiaistvu Zapadnoi Sibiri. 1971, Vol. 9, p. 98-115. In Russian. 28 refs. SD95.A6

Vegetation patterns.
Alpine vegetation.
Alpine soils.

28-120

Pridnia, M.V., 1972:

Natural forest regeneration of spruce including hylocomium, dicranum, and rhytidiadelphus in areas of concentrated logging in the Tavda-Konda interfluve (Estestvennoe lesovozobnovlenie na kontsentrirovannykh vyrubkakh el'nikov zelenomoshnikovyykh Tavda-Kondinskogo mezhdurech'ia). Akademiia nauk SSSR. Ural'skii nauchnyi tsentr. Institut ekologii rastenii i zhivotnykh. Trudy, 1972, Vol. 83, p. 194-216. In Russian. 41 refs.

Pridnia, M.V., 1972

Taiga vegetation
Forest ecosystems
USSR--Tavda

28-2670

Problems in geocryology (Problemy geokriologii). Akademiia nauk SSSR. Sibirskoe otdelenie. Institut merzlotovedeniia. Novosibirsk, Nauka, 1973, 108 p. In Russian. Numerous references. Individual papers see 28-1370 through 28-1380.

Active layer.
Soil moisture migration.
Cryogenic processes.

28-1369

Problems of the North: a current bibliography, 1972:

Akademiia nauk SSSR. Sibirskoe otdelenie. Gosudarstvennaia publichnaia nauchnotekhnicheskaiia biblioteka. June-Sept./Oct.-Dec. 1972. 98, 113 p. In Russian.

29-3225

Problems of the North; a current bibliography, 1974:

(Problemy severa; tekushchii ukazatel' literatury) Akademiia nauk SSSR. Sibirskoe otdelenie. Gosudarstvennaia publichnaia nauchno-tekhnicheskaiia biblioteka 1974 Nos.1,2 110, 105 p. In Russian.

29-3226

Productivity of Subarctic biogeocoenoses (Produktivnost' biogeotsenzov Subarktiki). Simpozium po izucheniiu, ratsional'nomu ispol'zovaniiu i okhrane vosproizvodimykh prirodnykh resursov Krainego Severa SSSR. Sverdlovsk, 1970, 246 p. In Russian with English table of contents enclosed. Proceedings of a Symposium on exploration, rational exploitation, and preservation of natural resources in far northern U.S.S.R. Akademiia nauk SSSR. Ural'skii filial.

2

Productivity of Subarctic biogeocoenoses, 1970

Forest tundra
Tundra vegetation
Soil formation
Soil moisture migration

26-3076

Prokhorova, Z.A. et al., 1971:

Agrochemical characteristics of soils in the Kamchatka region (Agrokhimicheskaiia kharakteristika pochv Kamchatskoi oblasti). Agrokhimicheskaiia kharakteristika pochv SSSR. Dal'nii Vostok. Moscow, Nauka, 1971, p. 170-239. In Russian. 42 refs. Sokolov, I.A.

Soil formation
Soil composition
Podsol
USSR--Kamchatka peninsula

26-3821

Proskuriakova, T.L. et al., 1972:

Soil temperature during autumn and winter and its dependence on limiting factors (Temperatura pochvy v osenne-zimnii period i ee zavisimost' ot obuslovlivaiushchikh faktorov). Proskuriakova, T.L., et al. Leningrad. Gosudarstvennyi gidrologicheskii institut. Trudy, 1972, Vol. 194, p. 155-164. In Russian. 18 refs. Sokolova, N.V.

Soil temperature.
Soil moisture migration.

28-744

Prozorov, I.U.S., 1973:

Natural characteristics of swamps in the Amur River area, state of the art, and research trends (Prirodnye osobennosti bolot Priamur'ia, ikh izuchennost' i zadachi dal'neishikh issledovani). Prirodnye osobennosti bolot Priamur'ia (Natural characteristics of swamps in the Amur River area). Novosibirsk, Nauka, 1973, p. 3-42. In Russian. 111 refs.

Soil formation
Peat
Vegetation

28-3481

Prozorov, I.U.S., 1974:

Swamps of the plains near the lower Amur River (Bologa nizheamurskikh nizmennostei) Novosibirsk, Nauka, 211 p. In Russian with abridged English table of contents enclosed. Refs. p. 205-210.

30-18

Prozorova, M.I., 1973:

Biological activity of swamp soils in the Udyl'Kizinskiy plain (Biologicheskaiia aktivnost' bolotnykh pochv Udyl'-Kizinskoi nimennosti). Prirodnye osobennosti bolot Priamur'ia (Natural characteristics of swamps in the Amur River area). Novosibirsk, Nauka, 1973, p. 186-190. In Russian. 2 refs.

Soil formation
Peat
Vegetation

28-3491

Pustovoitov, N.D., 1971:

Seasonally frozen soils and their melioration (Sezonno-merzlotnye pochvy i ikh melioratsiia). Moscow, Nauka, 1971, 231 p. In Russian. Bibliog. p. 222-229. No microfiche available.

Forest soils
Meadow soils
Soil moisture migration
USSR--Amur River

26-3875

Rabotnov, T.A., 1971:

Effect of ice formation in soils and on the surface, on meadow plants (Vliianie obrazovaniia l'da v pochve i na ee poverkhnosti na lugovye rasteniia) Moscow. Obshchestvo ispytatelei prirody. Biulleten'. Otdel biologicheskii. Jan.-Feb. 1971 76(1). p. 120-134. In Russian with English summary. 18 refs.

Soil moisture.
Plants. (Botany).
Soil temperature.

26-192

Rakhmanina, A.T., 1974:

Overground and underground phytomass in typical East-European forest tundras (Zapasy nadzemnoi i podzemnoi fitomassy v tipichnykh soobshchestvakh vostochnoevropeiskoi lesotundry) Botanicheskii zhurnal June 1974 59(6) p. 777-794. In Russian with English summary. 26 refs.

29-1291

Ramenskaya, M.L., 1971:

Analysis and correlation of certain soils and phytocoenoses in the nonmarshy mountain tundras of the Murmansk region (Analiz sopriazhennosti nekotorykh priznakov fitotsenozov i pochv nezabolochennykh gornykh tundr Murmanskoi oblasti). Botanicheskiy zhurnal, 1971, 56(8), p. 1122-1134. In Russian with English summary. 8 refs.

Tundra soils
Tundra vegetation
Mountain soils

26-3529

Ramenskaya, M.L., 1972:

Vegetation of the Pechenga tundra (Rastitel'nost' Pechenegskikh tundr) Flora i rastitel'nost' Murmanskoi oblasti (Murmansk Region vegetation) Leningrad, Nauka, p. 32-53. In Russian. 12 refs.

29-1405

Rasskazov, N.M. et al., 1971:

Basic hydrogeologic and hydrochemical features of peat deposits in the central Ob'-Irtys' interfluvium and the procedure of hydrochemical investigations of swamps (Osnovnye gidrogeologicheskie i gidrogeokhimicheskie osobennosti trofianykh mestorozhdenii tsentral'noi chasti Ob'-Irtys'skogo mezhdurech'ia i nekotorye voprosy metodiki gidrokhimicheskikh issledovaniy bolot). Podzemnye vody Sibiri i Dal'nego Vostoka (Ground water of Siberia and the Far East). Moscow, Nauka, 1971, p. 229-232. In Russian. Udodov, P.A., Emel'ianova, T.IA.,

2

Rasskazov, N.M. et al., 1971

Nazarov, A.D., Shamolin, V.A.

Peat

26-2714

Rebristaia, O.V., 1970:

Characteristics of plants in the eastern part of Bol'shezemel'skaya tundra (K kharakteristike flor vostochnoi chasti Bol'shezemel'skoi tundry). Akademiya nauk SSSR. Komi filial. Institut prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 64-73. In Russian. 12 refs.

Tundra soils.
Tundra vegetation.
Plant ecology.

26-1701

Resources of the biosphere (synthesis of the Soviet studies for the International Biological Programme) Vol. 1. Leningrad, Nauka, 1975.

BROWN

Rogacheva, E.V., 1973:

Zonal peculiarities of natural environments in the northern taiga and a system for their economic development (Zonal'nye osobennosti prirodnoi sredy taezhnogo Severa i sistema vedeniia promyslovogo khoziaistva). Problemy severa, 1973, Vol. 18, p. 80-86, In Russian. 16 refs.

Taiga vegetation
Taiga soils

28-3745

Roichenko, G.L., 1973:

Comparative characteristics of reddish brown alpine forest soils of the Carpathians and the Tien Shan. In Problemy Lesnogo Pochvovedeniia p. 168-176. In Russian.

NAL/CAIN (Lockheed)

Roichenko, G.I. et al., 1970:

Mountain-forest and mountain-meadow soils of Tien Shan and Pamiro-Alay (Gorno-lesnye i gorno-lugovye pochvy Tian'-Shania i Pamior-Alaia) Frunze, Ilim, 1970. 223p. In Russian with English table of contents enclosed. 163 refs. Mamytov, A.M.

Alpine soils.
Alpine vegetation.
Ecology.
USSR-Tien Shan,
USSR-Pamirs.

26-600

Roizin, M.B., 1972:

Biological activity of fine earth and primitive soils of mountainous arctic desert. Pochvovedenie, 9:47-50. In Russian. Egorov, V.I.

NAL/CAIN

Roizin, M.B., 1972:

Biological activity of Kola Peninsula podzolic soils. Pochvovedenie, 3: 106-114. In Russian. English summary. Egorov, V.I.

NAL/CAIN

AD-A051 813

COLD REGIONS RESEARCH AND ENGINEERING LAB HANOVER N H F/G 8/12
SELECTED BIBLIOGRAPHY OF DISTURBANCE AND RESTORATION OF SOILS A--ETC(U)
MAR 77 M ANDREWS
CRREL-SR-77-7

NL

UNCLASSIFIED

2 OF 2
AD
A051813



END
DATE
FILMED
4-78
DDC

Roizin, M.B., 1970:

Effect of soil cultivation methods and fertilizers on the microflora of sandy, illuvial-ferruginous podsol in the Murmansk region. (Vliianie sposobov obrabotki i vneseniia udobreniia na mikrofloru peschanogo illiuvial'no-zhelezistogo podzola Murmanskoj oblasti) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biogocial basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo,

2

Roizin, M.B., 1970:

1970 p. 152-156. In Russian. 18 refs.

Soil composition.
USSR-Murmansk.

26-1716

Romanova, E.N., 1972:

Basic problems in studying microclimate of tundra biocenoses (Osnovnye voprosy izucheniia mikro-klimata tundrovyykh biogeotsenozov). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 19-25. In Russian. 31 refs.

Tundra vegetation.
Plant ecology.

Romanova, E. N. et al., 1973:

Data on the thermal regime of Taymyr tundra soil (Nekotorye dannye po termicheskomu rezhimu pochvy Taimyrskoi tundry). Leningrad. Glavnaia geofizicheskaya observatoriia. Trudy, 1973, No. 306, pp. 100-107. In Russian. 6 refs. Utkina, Z. A.

Tundra soils
Mottled tundra
Soil temperature

28-1939

Roshchevskaya, R.A. et al., 1970:

Carbohydrates, nitrogen, phosphorus and potassium in meadow grasses growing in tundra (Uglevody, azot, fosfor i kalii v lugovykh travakh vyrashchivaemykh v tundre) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biogocial basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970. p. 89-94. In Russian. 14 refs. Shvetsova, V.M.

Tundra soils.
Tundra vegetation.
26-1705

Rubtsov, N.I., 1975:

Floral evolution rate according to an analysis of alpine vegetation in central Asia (O tempakh evoliutsii po dannym analiza vysokogornyykh flor Srednei Azii) Akademiia nauk Kazakhskoi SSR. Izvestiia. Seriia biologicheskaya July-Aug. 1975 No.4 p. 8-15. In Russian. 17 refs.

30-3406

Rudneva, E.N., 1970:

Peculiarities of sandy podzol soils in the northern Taiga of Europe (O nekotorykh osobennostiakh peschanykh podzolistykh pochv severotaezhnoi podzony Evropy) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi Knizhnoe izd-vo, 1970 p. 113-119. In Russian. 13 refs.

Taiga soils.
Podsol.
Taiga vegetation.

26-1709

Rusanova, G.V., 1975:

Content and some properties of podzolic soil concretions in middle-taiga subzone of Komi ASSR. Pochvovedenie 6: 3-11. In Russian. English summary. Tsypanova, A.N.; Bushueva, E.N.

NAL/CAIN

(Lockheed)

Rusanova, G.V., 1974:

Peculiar features of microstructure of podzol soils in the middle taiga subzone of the Komi ASSR with respect to their genesis. Trans Int Congr Soil Sci 10th (v.7): 239-246. In Russian. English summary.

NAL/CAIN

(Lockheed)

Sabo, E.D. et al., 1973:

It is necessary to drain forest swamps of the Baikal Lake region (Nuzhno li osushat' lesnye bolota Pribaikal'ia). Lesnoe khoziaistvo, Jan. 1973, No. 1, p. 80-87. In Russian. Kuksov, I.U.V.

Tundra terrain.
Tundra vegetation.
Plant ecology.

28-501

Saburov, D.N., 1972:

The Pinega forests (Lesa Pinegi). Leningrad, Nauka, 1972, 170 p. In Russian with abridged English table of contents enclosed. Ten pages of references.

Taiga soils.
Taiga vegetation.
Plant ecology.
USSR--Pinega River.

28-630

Sakai, A., 1973:

Ecological characteristics of forests in Yakutia plain. Low temperature science (Teion Kagaku). Series B Biological sciences, 1973, No. 31, p. 49-66. In Japanese with English summary. 12 refs.

Vegetation patterns
Taiga vegetation
Active layer

28-3509

Sakai, A., 1974:

Ecological characteristics of forests on the permafrost in Yakut. Jap J Ecol, 24(2): 116-122. In Japanese. English summary.

NAL/CAIN

Salamov, G.A., 1972:

On the evolution of brown alpine forest soils of the southeastern slope of the Greater Caucasus of Azerbaijan. Akad Nauk Azerbaidzh Ssr Izv Ser Biol Med Nauk 1: 48-54. In Russian. Mirzoev, S.H.I.

NAL/CAIN (Lockheed)

Salatova, N.G., 1973:

Development of a network of preserves and nature parks as a basis for conservation of the alpine resources of Siberia. In Okhrana Gornyykh Landshaftov Sibiri p. 196-209. In Russian.

NAL/CAIN (Lockheed)

Samolova, G.S., 1972:

Landscape types of the Altai Mountains (Tipy mestnosti gornogo Altaya). Landschaftnoi kartografirovaniye i fiziko-geograficheskoe raionirovaniye gornyykh oblastei (Landscape mapping and physiographic zoning of mountain regions), N.A. Gvozdet'skii, ed. MGU, 1972, p. 155-190. In Russian. 23 refs.

Tundra soils.
Tundra vegetation.
Alpine soils.
USSR--Altai Mountains.

28-733

Sannikov, S. M., 1972:

Natural regeneration of pine forests in the Tavda region in areas of continuous logging and burning (Estestvennoe vozobnovlenie na sploshnykh vyrubkakh i vyrubkakh-gariakh v Pritavdinskikh sosnovykh lesakh). Akademiia nauk SSSR. Ural'skii nauchnyi tsentr. Institut ekologii rastenii i zhivotnykh. Trudy, 1972, Vol. 83, p. 217-238. In Russian. 11 refs.

Taiga vegetation
Forest ecosystems
Taiga soils
USSR--Tavda
28-2671

Sannikov, S.M., 1972:

Pine cultures in bors of the Tavda region and methods for improving them (Kul'tury sosny v Pritavdinskikh borakh i mery ikh uluchsheniia). Akademiia nauk SSSR. Ural'skii nauchnyi tsentr. Institut ekologii rastenii i zhivotnykh. Trudy, 1972, Vol. 83, p. 239-255. In Russian. 7 refs.

Taiga vegetation
Forest ecosystems
Taiga soils
USSR--Tavda

28-2672

Sannikov, S.N., 1970:

Survival and growth of conifer seedlings in different types of microenvironment in clearings. Ecology (N Y), 1: 45-51. In English. Translated from Ekologiya 1:60-68.

NAL/CAIN

Savchenko, I.F., 1973:

Swamps in the Zeya-Bureya plain (Bolota Zeisko-Bureinskoi ravniny). Prirodnye osobennosti bolot Priamur'ia (Natural characteristics of swamps in the Amur River area). Novosibirsk, Nauka, 1973, p. 43-49. In Russian. 22 refs.

Vegetation
Plant ecology

28-3482

Savich, M.A., 1975:

Main vegetation patterns of the Tsagan-Shibetu ridge (Tuvinskaya ASSR) (Osnovnye zakonomernosti raspredeleniia rastitel'nogo pokrova khr. Tsagan-Shibetu (Tuvinskaya ASSR)) Moscow. Universitet. Vestnik. Seriya 5 Geografiia Nov.-Dec. 1975 No.6 p. 101-104. In Russian with English summary. 3 refs.

30-3191

Savvinov, D.D., 1974:

Division of Yakutian plains into regions according to hydrothermal conditions of soils (Pochvennoe gidrotermicheskoe raionirovanie ravninnoi territorii i Akutii) Biologicheskie problemy Severa, VI simpozium; Vypusk 6: (Biological Problems of the North, 6th symposium; Vol. 6:) Yakutsk, Akademiia nauk SSSR, p. 87-91. In Russian.

29-1071

Scherbakov, I.P., 1972:

Forests in northeast Asia (Lesnoi pokrov severo-Vostoka Azii) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 185-193. In Russian with English summary. 39 refs.

30-696

Scherbakov, I.P., 1975:

Forests of the northeastern USSR (Lesnoi pokrov Severo-Vostoka SSSR) Novosibirsk, Nauka, 1975 344 p. In Russian with abridged English table of contents enclosed. Refs. p. 292-305.

30-911

Scientific-Industrial conference on soil erosion in the Lake Baykal basin, Oct. 9-11, 1974:

Abstracts (Nauchno-proizvodstvennaia konferentsiia po erozii pochv basseina oz. Baikal, 9-11 ik. 1974 g. Tezisy dokladov) Akademiia nauk SSSR. Sibirskoe otdelenie. Buriatskii filial Ulan-Ude, 107 p. In Russian.

30-1579

Segal', A.N., 1972:

Ecological-physiological basis for bioenergetics of vertebrates in the North (problems, content and methods of investigation) (Ekologo-fiziologicheskie osnovy bioenergetiki pozvonochnykh zhivotnykh na Severa (zadachi, sodержanie i metodika issledovaniia). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 121-126. In Russian.

Tundra vegetation.
Ecosystems

28-1268

Semenov, I.V. et al., 1973:

Complex physiographic boundary of the Arctic (Kompleksnaia fiziko-geograficheskaia granitsa Arktiki). Geograficheskoe obshchestvo SSSR. Izvestiia, July-Aug. 1973, 105(4), p. 313-319. In Russian. 28 refs. Sisko, R. K.

Arctic regions
Arctic soils
Arctic vegetation

28-1667

Semenov, I.V. et al., 1973:

Peculiarities of the Arctic complex of natural environments (Osobennosti arkticheskogo prirodnogo kompleksa). Leningrad. Arkticheskii i Antarkticheskii nauchno-issledovatel'skii institut. Trudy, 1973, Vol. 318, p. 13-31. In Russian. 68 refs. Sisko, R.K.

Bibliographies
Arctic terrain
Arctic vegetation

28-3802

Semikhatova, O.A. et al., 1973:

Respiration intensity in several plant species from Heiss Island (Franz-Josef Land) (Intensivnost' dykhaniiia neskol'kokh vidov rastenii ostrova Kheisa (Zemlia Frantsa-Iosifa). Botanicheskii zhurnal, Dec. 1973, 58(12), p. 1816-1819. In Russian. 10 refs. Shukhtina, G. G.

Arctic vegetation
Plant ecology
Arctic terrain

28-2237

Sergeev, G.M., 1971:

Microclimatic peculiarities of temperature regime in the West Siberian taiga. Mikroklimaticheskie osobennosti temperaturnogo rezhima taezhnoi zony Zapadnoi Sibiri. Klimat pochvi. (Soil climate. Proceedings of the Conference of the Scientific Council on the study of Climatic and Agroclimatic Resources, Nov., 1969). Leningrad, Gidrometeoizdat, 1971, p. 210-218. In Russian. 5 refs. S600.M55

Taiga soils.
Soil temperature.

27-1033

Serova, N.V., 1971:

Charting the thermal characteristics of soil. O kartirovanii teplofizicheskikh kharakteristik pochv. Klimat pochvi. (Soil climate. Proceedings of the Conference of the Scientific Council on the Study of Climatic and Agroclimatic Resources, Nov., 1969). Leningrad, Gidrometeoizdat, 1971, p. 80-86. In Russian. 12 refs. S600.M55

Soil moisture.
Soil temperature.
Soil composition.

27-1032

Sever'ianov, A.N., 1976:

Environmental protection in coal-mining parts of the permafrost zone. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 40-41.

BROWN

Shamanova, I.I., 1970:

Effects of snow, vegetation and tilling on the thermal state of the ground in the Vorkuta region (Vliianie snega, rastitel'nogo pokrova i raspashki na teplovoe sostoianie gruntov v raione Vorkuty). Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North). Syktyvkar, Komi knizhnoe izd-vo, 1970, p. 186-195. In Russian. 12 refs.

Shamanova, I.I., 1970

Vegetation factors
Tundra soils

26-1723

Shamurin, V.F., 1970:

Phytomass of some tundra communities in the Vorkuta region. (Zapas fitomassy v nekotorykh tundrovyykh soobshchestvakh raiona Vorkuty) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 25-29. In Russian. 8 refs.

Tundra soils.
Tundra vegetation.
Ecology.

26-1694

Shamurin, V.F. et al., 1972:

Plant biomass of main plant communities at the Tareya Station (Taimyr). International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 163-181. 4 refs.
Polozova, T.G. Khodachek, E.A.

2

Shamurin, V. F. et al., 1972:

Tundra vegetation.
Plants (Botany).
Biomass.

27-2673

Shamurin, V.F., 1975:

Primary production of tundra communities. Resources of the biosphere (synthesis of the Soviet studies for the International Biological Programme) Vol. 1. Leningrad, Nauka, p. 12-24.

BROWN

Shamurin, V.F., 1974:

Relationships between entomophilous plants and anthophilous insects in arctic ecosystems. Zh Obshch Biol, 35(2): 243-250. In Russian. English summary.
Tikhmenev, E.A.

NAL/CAIN

Shavrov, L.A., 1971:

Long polar day and the winter hardiness of woody plants. Dlinnyi poliarnyi den' i zimostoi-kost' pereselennykh derevianistykh rastenii. Vvedenie v kul'turu novykh vidov poleznykh rastenii v usloviakh Krainego Severa (Introduction of new types of useful plants in the Far North). Leningrad, Nauka, 1971 p. 17-52. In Russian. 44 refs.

Forest tundra.
Tundra vegetation.

2

Shavrov, L.A., 1971:

Tundra soils.
USSR-Kola Peninsula.

27-2584

Shchelkunova, R.P., 1975:

The lichen cover change caused by the human activity at the north of the Yenisei Basin. XXIII International Geographical Congress. Symposium: Geography of Polar Countries. Tour K-29. Leningrad, Hydro-meteorological Publishing House, 1975. p. 136-137.

BROWN

Shcherbakov, I.P., 1971:

Reforestation of cut-over areas in northeast Yakutia (Lesovozobnovlenie na lesosekakh severovostochnoi IAKutii) Respublikanskoe soveshchanie po okhrane prirody IAKutii, 5th, Irkutsk, 1971. Okhrana prirody IAKutii (Conservation in Yakutia) Irkutsk, Vostochno-Sibirskoe knizhnoe izd-vo, p. 89-94. 3 refs. In Russian.

29-3807

Shcherbakova, L.N., 1972:

Black-and-white varieties of landscape maps of mountain regions (Cherno-belye varianty landshaftnykh kart gornyykh territorii). Landshaftnoe kartografirovaniye i fiziko-geograficheskoe raionirovaniye gornyykh oblastei (Landscape mapping and physiographic zoning of mountain regions), N.A. Gvozdetskiy, ed. MGU, 1972, p. 233-234. In Russian.

Tundra.
Forest tundra.
Taiga.

28-737

Shi'atov, S.G., 1972:

Effect of snow cover on plant communities in the Far North (Izucheniye snezhtogo pokrova i ego vliyanie na rastitel'nye soobshchestva Krainego Severa). Izucheniye biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 40-43. In Russian.

Tundra vegetation.
Forest tundra.
Tundra soils.

28-1251

Shi'atov, S. G., 1970:

Types of the upper forest lines in the polar Urals and its dynamics (O tipakh verkhnei granitsy lesa i ee dinamike na poliarnom Urale) Akademiya nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniya prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 73-81. In Russian. 13 refs.

Arctic vegetation.
USSR-Ural Mountains.

26-1702

Shikhmirov, M.G., 1971:

Flora and vegetation of the subnival belt of the Samur River basin (Dagestan) (Flora i rastitel'nost' subnival'nogo polasa basseina Samura (Dagestan)). Botanicheskii zhurnal, 1971, 56(8), p. 1211-1216. In Russian. 5 refs.

Alpine soils
Alpine vegetation
Ecology
USSR--Caucasus

26-3530

Shikhmirov, M.G., 1974:

The flora of the alluvial deposits of the Samur River basin. Izv Akad Nauk Az SSR, Ser Biol Nauk, 2: 10-14. In Russian.

NAL/CAIN

Shikhmirov, M.G., 1975:

Materials about the vegetation in the Kusarskaya zone of the Samur basin. Izv Akad Nauk Az SSR, Ser Biol Nauk, 1: 20-26. In Azerbaizhan.

NAL/CAIN

Shikhmirov, M.G., 1975:

The vegetation of the Samur-Divichinskaia lowland (against the background of swamp meadows) and ways of increasing its forage importance. Izv Akad Nauk Az SSR, Ser Biol Nauk, 4: 15-20. In Russian.

NAL/CAIN

Shilova, N.V., 1972:

Shoot apex and the formation of shoots in some Saxifraga L. species in the Dhukot tundra (Stroenie verkhushki pobega i pobegoobrazovanie u nekotorykh vidov Saxifraga L. v tundrakh Chukotki) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 250-255. In Russian with English summary.

30-700

Shishkina, L. P., 1973:

Vegetation of the Pur-Taz forest tundra (Nekotorye svedeniya o rastitel'nosti Pur-Tazovskoi lesotundry). Zhizn' zemli; sbornik, 1973, Vol. 9, p. 135-144. In Russian. 8 refs.

Tundra soils
Soil profiles
Tundra vegetation

28-3181

Shliakov, R. N., 1973:

Studies of hepaticae from the European and West Siberian North of the USSR (Nekotorye rezultaty izucheniia pechenochnykh mkhov evropeiskogo i zapadnosibirskogo Severa SSSR). Botanicheskii zhurnal, Oct. 1973, 58(10), p. 1536-1553. In Russian. 30 refs.

Arctic soils
Tundra vegetation
Taiga soils

28-2231

Shlotgauer, S.D., 1972:

Peculiarities of alpine vegetation of the southwestern Zhugdzhur Highlands (Nekotorye osobennosti vysokogornoj rastitel'nosti iugo-zapadnogo Dzhugdzhura) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 120-126. In Russian with English summary. 9 refs.

30-690

Shoba, S.A. et al., 1973:

Micromorphological structure of soddy-gley and secondary Podsolcic soils of the Ob River Valley near Tomsk (Osobennosti mikromorfologicheskogo stroeniia dernovo-gleevykh i vtorichno-podzolistykh pochv tomskogo Priob'ia). Moscow. Universitet. Vestnik. Seriya 6, Biologiya i pochvovedenie, 1973, No. 1, p. 69-76. 7 refs. Fedorov, K.N.

Soil structure.
Taiga soils.
Soil formation.

28-142

Shuzhmov, A.A., 1972:

Economic effectiveness of the restoration of Northern Taiga. Ekonomicheskaya effektivnost' vosproizvodstva severotaezhnykh lesov. Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Izvestiia vysshikh uchebnykh zavedenii. Lesnoi zhurnal. 1972 No. 4. p. 150-155. In Russian. 12 refs.

Taiga soils.
Taiga vegetation.
Plant ecology.

27-2324

Shvarts, S.S., 1972:

Biogeocoenoses of the forest tundra and the southern tundra (Biogeotsenozy lesotundry i iuzhnoi tundry) Zhurnal obshchei biologii Nov.-Dec. 1972 33(6) p. 648-656) In Russian with English summary. 16 refs. Danilov, N.N.

29-3329

Shvarts, S.S. et al., 1972:

Small rodents as components of biocoenoses (Izuchenie melkikh gryzunov kak komponents biogeotsenoza). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocoenoses) Leningrad, Nauka, 1972, p. 113-115. In Russian, 9 refs. Smirnov, V.S.

Tundra vegetation.
Ecosystems.
Plant ecology.

28-1265

Shvedchikov, G.V., 1974:

Ecology of plant communities with *Arctophila fulva* in the lower course of the Kolyma River (K ekologii rastitel'nykh soobshchestv s *Arctophila fulva* v nizov'iakh reki Kolymy). Botanicheskii zhurnal, March 1974, 59(3), p. 386-393. In Russian. 33 refs.

Tundra vegetation
Plant ecology
Tundra soils

28-4228

Shvetsov, P.F. et al., 1973:

Basic regularities governing cryogenic processes in fine-grained clayey and sandy formations (Osnovnye zakonomernosti kriogenykh protsessov v pylevato-glinistykh i peschanykh obrazovaniakh). International Conference on Permafrost, 2nd, Yakutsk, 1973 1973, Vol. 4, p. 63-73. In Russian. 22 refs. Grechishchev, S.E. Chistotinov, L.V.

Cryogenic processes.
Soil moisture migration.

28-1083

Shvetsov, P.F., 1975:

Changes in geocryological conditions of economically developed lands, and their forecasting for mining exploration. Environment Protection in Relation to Economic Development of Permafrost Regions. Abstracts of Papers presented at a Conference. p. 64-65. In Russian.

BROWN

Shvetsova, V.M. et al., 1971:

Diurnal and seasonal variations in the rate of photosynthesis in some plants of western Taimyr. International Tundra Biome. Translation April 1971 no. 2. 11p. Translated from Botanicheskii Zhurnal 55(1): 66-76, 1970. 21 refs. Voznesenskii, V.L.

Photosynthesis.
Plants (Botany).

26-657

Shvirst, A.A., 1974:

Perennial grasses at the bottom of sunken thermokarst lakes (Mnogoletnie travy na dne spuchchennykh termokarstovykh ozer) Biologicheskie problemy Severa, VI simpozium, Vypusk 4 (Biological problems of the North, 6th symposium, Vol.4) Yakutsk, Akademiia nauk SSSR, p. 92-96. In Russian.

29-3666

Significance of forests in water preservation and environment protection. Proceedings of the Conference, 1974:

(Vodookhranno-zashchitnoe znachenie lesa. Materialy knoferentsii) Vsesoiuznaia nauchnaia konferentsiia po vodookhranno-zashchitnomu znacheniiu lesa, Vladivostok, 1974. Vladivostok, 100 p. In Russian.

30-1578

Simkin, G.N., 1974:

Biogeocoenoses of taiga forests (Perm' region) (Biogeotsenozy taezhnogo lesa (na primere Permskoi oblasti)) MGU, 175 p. In Russian with English table of contents enclosed. Refs. p. 169-174

29-1417

Sinel'shchikova, Z.I., 1972:

Development of spruce and birch stands in the Tavda-Konda interfluvium (Razvitie elovo-berezovykh drevostoev na mezhdurech'e Tavda-Konda). Akademiia nauk SSSR. Ural'skii nauchnyi tsentr. Institut ekologii rastenii i zhivotnykh. Trudy, 1972, Vol.83, p. 99-131. In Russian. 27 refs.

Taiga vegetation
Forest ecosystems
Taiga soils
USSR--Tavda

28-2667

Sinel'shchikova, Z. I., 1973:

Dynamics of wood sorrel and lime-tree spruce forests in the southern taiga zone of the Transurals (Dinamika el'nika kislichnikovogo i lipniakovogo v luzhnotaezhnykh lesakh Zaural'ia). Ekologiya, Sept.-Oct. 1973, No. 5, p. 39-45. In Russian. 15 refs.

Mountain soils
Taiga vegetation
Plant ecology

28-1669

Siplivinskii, V.N., 1975:

High altitude vegetation of the Sokhondo Mountain (Transbaikal) (Vysokogornaia rastitel'nost' gory Sokhondo (Zabaikal'e)) Botanicheskii zhurnal March 1975 60(3) p.331-341. In Russian. 12 refs.

29-3799

Sisko, R.K., 1973:

Features of the seasonally thawing layer of Novosibirsk Archipelago (Osobennosti sezonnotalogo sloia Novosibirskogo Arkhipelaga). Leningrad. Arkticheskii i Antarkticheskii nauchno-issledovatel'skii institut. Trudy, 1973, Vol. 318, p. 100-113. In Russian. 11 refs.

Active layer thickness
Soil moisture migration
USSR--Novosibirsk Archipelago

28-3807

Sisko, R.K., 1970:

Taimyr and Severnaya Zemlya regions (Physiographic conditions) (Taimyro-Severozemel'skaia oblast' (Fiziko-geograficheskaya kharakteristika)) Leningrad, Gidrometeorologicheskoe izd-vo, 373 p. (pertinent p. 225-237, 265-300) In Russian. 340 refs.

29-813

Skabichevskii, A.P. ed., 1973:

New developments in geography and taxonomy of Siberian vegetation (Novosti geografii i sistematiki rastenii Sibiri). Novosibirsk, Nauka, 1973, 119 p. In Russian. Refs. Akademiia nauk SSSR. Sibirskoe otdelenie. Tsentral'nyi Sibirskii botanicheskii sad.

Tundra vegetation
Taiga vegetation

28-2700

Smirnov, V.V., 1976:

Engineering standards for earthwork used in the construction of pipelines and consequent disturbances of natural environments (vegetation, soils, surface layers of ground). Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 21-22.

BROWN

Smirnov, A.V., 1972:

Evaluating plant behavior in central Siberia forests damaged by human activity. Otsenka povedeniia rastenii lesov iuga srednei Sibiri posle vozdeistviia antropogennykh lescrazurshitel'nykh faktorov. *Ekologiya*, 1972 No. 2, p. 79-87. In Russian, 12 refs.

Taiga vegetation.
Plant ecology.
Taiga soils.
Damage.

27-1693

Smirnov, M.P., 1972:

Distribution and peculiarities of organic substances in river waters of the tundra zone. Raspredelenie i osobennosti organicheskikh veshchestv rechnykh vod tundrovoi zony. *Gidrokhimicheskie materialy*, 1972 Vol. 53, p. 71-85. In Russian. 17 refs.

Tundra soils.
Tundra vegetation.
Soil moisture migration.

27-869

Smirnov, V.S. et al., 1972:

Influence of consumers on natural phytocenosis production variation. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 122-127. 4 refs. Tokmakova, S.G.

Tundra vegetation.

27-2666

Smirnov, V.V., 1974:

Soil disturbance by engineering activities and the first stages of vegetation reestablishment in biogeocoenoses of the eastern polar Urals (Kharakter naursheniia pochvenno-rastitel'nogo pokrova v biogeosenozakh vostochnogo sklona Poliarnogo Urala pri nekotorykh inzhenernykh vozdeistviakh) *Biologicheskie problemy Severa*, VI simpozium; Vypusk 6 (Biological Problems of the North, 6th symposium; Vol.6) Yakutsk, Akademiia nauk SSSR, p. 157-161. In Russian.

29-1076

Snytkin, G.V., 1972:

Heat value of phytomass and plant remains in the far northeast (Raspredelenie energeticheskikh zapasov fitomassy i rastitel'nykh ostatkov na Krainem Severo-Vostoke) *Vsesoiuznyi simpozium po biologicheskim problemam Severa*, 5th, Magadan, Apr. 18-22, 1972. *Pochvy i rastitel'nost' merzlotnykh raionov SSSR* (Soil and vegetation of permafrost regions in the USSR) p. 318-322. In Russian with English summary. 10 refs.

30-706

Sobolev, L.N., 1972:

General characterization of vegetation (Obshchiye zakonomernosti rastitel'nogo pokrova) In *Prirodnyye usloviya osvoyeniya Tazovskogo neftegazonosnogo rayona: Rastitel'nost', yeye resursy i vozmozhnostii osvoyeniya*, p. 143-150. Moscow, Izd. Nauka. In Russian.

GeoRef

Sobolev, L.N., 1972:

Vegetation of the Issyk-Kul Basin. Ocherk rastitel'nosti Issyk-Kul'skoi kotloviny. Frunze, Ilim, 1972. 107p. In Russian with English table of contents enclosed. 113 refs. No microfiche available.

Alpine soils.
Alpine vegetation.
Plant ecology
USSR-Issyk-Kul Lake.
USSR-Tien Shan.

27-2638

Sobolevskaya, K.A. et al., 1970:

Alpine Xerophytes of Altai as plant-introduction material (Flora nagornykh kserofitov Altaia kak material dlia introduktsii). *Ekologo-morfologicheskie i biokhimicheskie osobennosti poleznykh rastenii dikorastushchei flory Sibiri* (Ecologic-morphological and biochemical properties of useful plants of the Siberian wild flora). Novosibirsk, Nauka, 1970, p. 3-13. In Russian. 27 refs. Timokhina, S.A. SB 108.R9E38

2

Sobolevskaya, K.A. et al., 1970

Mountain soils
Alpine vegetation
Tundra soils
USSR--Altay Mountains

26-1921

Sobolevskaya, K.A. ed., 1972:

Natural flora of Siberia used in landscaping (Rasteniia prirodnoi flory Sibiri dlia zelenogo stroitel'stva). Novosibirsk, Nauka, 1972, 256 p. In Russian. For selected articles see 28-3930 through 28-3937.

Arctic soils
Arctic vegetation
Plant ecology

28-3929

Sochava, V.B. et al., 1972:

Problems of the Subarctic on the territory of the USSR. 1972, Vol. 1. International Geographical Congress, 22nd, Montreal, 1972. Papers. Edited by W.P. Adams and F.M. Helleiner. p. 1337-1341. 4 refs. Bachurin, G.V., Vorob'ev, V.V., Mikhailov, U.P., Prokhorov, B.B., Shotskii, V.P. G56.I6 1972

Tundra.
Forest tundra.
Taiga.

28-1595

Sochava, V.B. et al., 1970:

Topologic peculiarities of heat and moisture conditions in Taiga Geosystems (Topologicheskije osobennosti tepla i vlagi v taezhnykh geosistemakh) Akademiia nauk SSSR. Institut geografii Sibiri i Dal'nego Vostoka. Doklady 1970 vol. 26 p. 39-53. In Russian. 17 refs. Bachurin, G.V.; Krauklis, A.A.; Nechaeva, E.G.

Taiga soils.
Soil moisture migration.

26-924

Soil and vegetation of permafrost regions in the USSR (Pochvy i rastitel'nost' merzlotnykh raionov SSSR) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Magadan, 1973 392 p. In Russian. Numerous refs.

30-671

Soil cyrogenesis. (Pochvennyi kriogenez) Moscow, Nauka, 1974:

244 p. Contribution to the 10th International Congress of Soil Science, Moscow, 1974. In Russian. Refs. p. 222-235.

29-1987

Soil studies in Karelia (Pochvennye issledovaniia v Karelii) International Congress of Soil Science, 10th, Moscow, 1974. Petrozavodsk, 1974 216 p. In Russian with English summaries. Numerous refs.

29-3761

Soils and productivity of plant communities, vol. 1, 1972:

Pochvy i produktivnost' rastitel'nykh soobshchestv. Vyp. 1. Moscos, MGU, 221 p. In Russian with English table of contents enclosed. Numerous references.

27-1226

Sokolov, I.A., 1976:

Characteristic of soil formation on loose silicate rocks in frozen-Taiga regions. Pochvovedenie 5: 29-42. In Russian. English summary. Gradusov, B.P.; Tursina, T.V.; TSiurupa, I.G.; Tiapkina, N.A.

NAL/CAIN

(Lockheed)

Sokolov, I.A., 1974:

Description of soil formation on unconsolidated silicate rocks in the Permafrost-Taiga region. Sov Soil Sci 6(3): 269-282. In English. Gradusov, B.P.; Tursina, T.V.; Tsyurupa, I.G.; Tyapkina, V.V.

NAL/CAIN

(Lockheed)

Sokolov, I.A., 1972:

Peculiarities of autochthonous polar-boreal soil formation on basic rocks of the Putoran Plateau (Osobennosti avtonomnogo poliarno-boreal'nogo pochvoobrazovaniia na osnovnykh porodakh (Plato Putorana)) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 41-47. In Russian with English summary. 2 refs.

30-677

Soldatenkova, Y.P., 1972:

Vegetation and soil temperatures in the neighborhood of Yar-Sale Yamal USSR. J Yamagata Agric For Soc 27(4): 51-57. In Russian.

Biol. Abst. Inc.

Staniukovich, K.V. et al., 1972:

Basic principles for separating type zones of mountain vegetation in the USSR. Osnovnye printsipy vydeleniia tipov poiasnosti rastitel'nogo pokrova v gorakh SSSR. Geograficheskoe obshchestvo SSSR, Izvestiia, May-June 1972, 104(3), p. 174-182. In Russian. 8 refs. Staniukovich, M.B.

Mountain soils.
Taiga soils.
Vegetation.

27-877

Staniukovich, K.V., 1970:

Classification of plant associations of the earth on the basis of their ecologic rhythms (Opyt klassifikatsii rastitel'nykh soobshchestv zemnogo shara na osnove ikh ekologicheskoi ritmiki) *Ekologiya* 1970 No. 1 p. 18-26. In Russian. 18 refs.

Tundra soils.
Tundra vegetation.
Ecosystems.

26-1056

Stenina, T.A., 1970:

Biological activity of tundra soils (K voprosu o biologicheskoi aktivnosti tundrovyykh pochv) *Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa* (Biogeochemical basis for the utilization of natural resources in the North) syktyvkar, Komi knizhnoe izd-vo, 1970 p. 147-152. In Russian. 3 refs.

Tundra soils.
Tundra vegetation.
Soil formation.

26-1715

Stenina, T.A., 1973:

Biological and agrochemical properties and fertilization of ploughed humus peaty soils of middle taiga subzone in Komi ASSR. *Pochvovedenie* 12: 30-37. In Russian. English summary. Ievlev, N.I.; Rychkova, V.A.

NAL/CAIN (Lockheed)

Stepanova, I.V., 1973:

Fungi occurring in common plant communities of Taimir tundra. *Mikol. Fitol.* 7(1): 12-15. In Russian. Tomilin, B.A.

NAL/CAIN

Stepanova, I.V. et al., 1972:

Fungi of basic plant communities in Taimyr tundras. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee. April 1972. p. 193-198. 5 refs. Tomilin, B.

Tundra vegetation.
Fungi.

27-2677.

Stepanova, I.V., 1971:

Micromycetes in the Taimyr research station area (Briby-mikromitsety Taimyrskogo Statsionara) *Biogeotsenozy Taimyrskoi tundry i ikh produktivnost'* (Biogeocenoses of Taimyr tundra and their productivity) Leningrad, Nauka, p. 138-144. In Russian with English summary. 7 refs. Tomilin, B.A.

27-1547

Steshenko, A. P., 1973:

Determination of age in pulvinal plants (*Sibbaldia tetrandra* Bunge) growing in the highlands of Pamirs (Opredelenie vozrastra rastenii-podushek (*Sibbaldia tetrandra* Bunge) v usloviakh vysokogorii Pamira). *Botanicheskii zhurnal*, 1973, 58(7), p. 1004-1011. In Russian. 24 refs.

Alpine vegetation
Plant ecology
Alpine soils

Storozheva, M.M., 1970:

Peculiarities of the northern Ural swamps (eastern slope and the area east of the Ural mountains). *Nekotorye provintsial'nye osobennosti bolot severnogo Urala (vostochnyi sklon i Zaural'e)*. *Akademiia nauk SSSR. Sibirskoe otdelenie. Institut geografii Sibiri i Dal'nego Vostoka. Doklady*, 1970 Vol. 25. p. 73-75. In Russian. 7 Refs.

Soil formation.
Soil moisture migration.

27-1736

Strelkov, S.A. et al., 1973:

Problems in natural environment preservation in the northern Kola Peninsula (Voprosy okhrany prirody Kol'skogo Severa). *Problemy severa*, 1973, Vol. 18, p. 107-110. In Russian. Freidin, I.L.

Tundra terrain
Tundra soils
USSR--Kola Peninsula

28-3748

Study of tundra and forest-tundra biocenoses (Izucheniye biogeotsenozov tundry i lesotundry). Leningrad, Nauka, 1972, 128 p. In Russian. Numerous references. For individual papers see 28-1246 through 28-1268.

Tundra soils.
Forest tundra.
Tundra vegetation.

28-1245

Sukhodol'skii, S.E., 1976:

Consequences of environmental disturbance during pipeline construction in northern West Siberia. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 62-63.

BROWN

Sukhov, V.A., 1974:

Studying perennial grasses in central Yakutia (Izuchenie mnogoletnikh trav v tsentral'noi IAKutii) Biologicheskii problemny Severa, VI simpozium, Vypusk 4 (Biological problems of the North, 6th symposium, Vol.4) Yakutsk, Akademiia nauk SSSR, p. 104-108. In Russian.

29-3669

Sumochkina, T. E., 1971:

Ecological appraisals of certain mountain landscapes. K metodike ekologicheskoi otsenki nekotorykh gornnykh landshaftov. Tashkend. Sredneaziatskii nauchno-issledovatel'skii gidrometeorologicheskii institut. Trudy 1971 55(70). p. 57-68. In Russian. 30 refs. QC451.T28.

Alpine vegetation.
Plant ecology.

27-2630

Sumochkina, T. E., 1971:

Methods of measuring soil moisture and its constants. O nekotorykh metodakh izmereniia vlazhnosti pochvy i ee konstant. Tashkend. Sredneaziatskii nauchno-issledovatel'skii gidrometeorologicheskii institut. Trudy 1971 55(70). p. 75-80. In Russian. 12 refs. QC851.T28.

Mountain soils.
Soil moisture.
Soil temperature.

27-2632

Sumochkina, T. E. et al., 1971:

Observing phases of development and the height of mountain pasture plants. K metodike nabliudenii za fazami razvitiia i vysotoi pastbishchnykh rastenii v gornnykh usloviakh. Tashkend. Sredneaziatskii nauchnoissledovatel'skii gidrometeorologicheskii institut. Trudy 1971 55(70). p. 13027. In Russian. 12 refs. Gringof, I. G. QC851.T28.

Alpine Vegetation
Alpine soils.

27-2629

Surovikina, V.I., 1974:

Productivity of fodder crops introduced in the forest tundra (o produktivnosti kormovykh kul'tur introdutsiruemyykh v lesotundre) Biologicheskii problemy Severa, VI simpozium, Vypusk 4 (Biological problems of the North, 6th symposium, Vol.4) Yakutsk, Akademiia nauk SSSR, p. 101-104. In Russian.

29-3668

Sushkina, N.N. et al., 1972:

Composition of microflora in primitive alpine soils of the East Pamirs (O sostave mikroflory primitivnykh vysokogornnykh pochv Vostochnogo Pamira). Moscow. Universitet. Vestnik. Seriya 6, Biologiya, pochvovedenie, Jan.-Feb. 1972, No. 1. p. 76-85. In Russian with English summary. 17 refs.

Gordeikina, N.I.
Subarctic soils
Alpine soils
Alpine vegetation
USSR--Pamirs

26-3695

Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions, ed. by P.I. Melnikov. U.S. Army Cold Regions Research and Engineering Laboratory. TL 518, May 1976. Selected abstracts from Russian text, for which see 30-2381.

BROWN

Sysuev, V.V., 1973:

Landscape and geochemistry of high moor (Landshaftno-geokhicheskii cherty verkhovogo bolota). Moscow. Universitet. Vestnik. Seriya 5. Geografiia, March-April, 1973. No. 2, p. 57-61. In Russian with English summary. 6 refs.

Plant ecology.
Peat.

28-70

Talantsev, N.K., 1971:

Methods of increasing productivity of southern taiga pine forests of the Tomsk region (Puti povysheniia produktivnosti liuzhtotaezhnykh sosniakov Tomskoi oblasti). Akademiia nauk SSSR. Sibirskoe otdelenie. Biologicheskii institut. Trudy po lesnomu khozhiaistvu Zapadnoi Sibiri, 1971, Vol. 9, p. 19-31. In Russian. 6 refs. SD95.A6

Taiga soils.
Taiga vegetation.

28-115

Talantsev, N.K., 1973:
Sources of seeding and their role in forest regeneration. Lesn Khoz, 10: 44-45. In Russian.

NAL/CAIN

Taran, I.V., 1971:
Cedar forests of Novosibirsk region and measures of increasing their productivity (Kedrovye lesa Novosibirskoi oblasti i meropriiatiia po povysheniiu ikh produktivnosti). Akademiia nauk SSSR. Sibirskoe otdelenie. Biologicheskii institut. Trudy po lesnomu khozhiaistvu Zapadnoi Sibiri. 1971, Vol. 9, p. 58-66. In Russian. 8 refs. SD95.A6

Taiga soils.
Taiga vegetation.
Plant ecology.

28-118

Taran, I.V., 1973:
Forests of the Ob' River valley (Lesa Priob'ia). Rastitel'nost' Priob'ia i ee khozhiaistvennoe ispol'zovanie (Vegetation of the Ob' River valley and its economic usefulness). Novosibirsk, Nauka, 1973, p. 62-78. In Russian. 13 refs.

Forest ecosystems
Subarctic vegetation
Subarctic soils

28-1930

Taran, I.V., 1973:
The pine forests of western Siberia (Sosnovye lesa zapadnoi Sibiri) Novosibirsk, "Nauka" Sibirskoe Otd-Nie, 292 p. In Russian. Krylov, G.V.;

NAL/CAIN

Targul'ian, V.O., 1974:
Factors and mechanisms responsible for the differentiation of the profile of autonomous soils in boreal regions. Trans Int Congr Soil Sci, 10th (v.6, pt. 1): 93-101. In Russian. English summary. Karavaeva, N.A.; Sokolov, I.A.

NAL/CAIN

Targul'ian, V.O., 1971:

Soil formation and weathering in cold humid regions (on massive-crystalline and sandy polymictic rocks) (Pochvoobrazovanie i vyvetrivanie v kholodnykh gumidnykh oblastiakh (na massivno-kristallicheskikh i peschanykh polimiktovykh porodakh)). Moscow, Nauka, 1971, 268 p. In Russian with English summary. 311 refs. No microfiche available. S592.2.T37

Tundra soils
Taiga soils
Soil formation

26-2715

Tatarchenkov, M.I., 1971:

Review of research on the vegetation of the northeastern U.S.S.R. (Istoriia izuchenia i sostoianie issledovaniia flory i rastitel'nosti severo-vostoka SSSR). Akademiia nauk SSSR. Dal'nevostochnyi tsentr. Severo-vostochnyi kompleksnyi institut. Trudy, 1971, Vol. 42, p. 158-173. In Russian. 100 refs.

Arctic vegetation
Plant ecology
Arctic soils

28-1842

Tatarkina, A.A., 1972:

Soils of the agricultural areas in the Magadan region (Pochvy zemledel'cheskikh raionov Magadanskoi oblasti) Vsesoiuznyi simpozium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 63-66. In Russian with English summary. 12 refs.

30-680

Tikhmenev, E.A. et al., 1973:

Anthecological studies of grasses in Arctic tundras of Wrangel Island (K antekologii zlakov arkticheskoi tundry ostrova Vrangelia). Botanicheskii zhurnal, Oct. 1973, 58(10), p. 1474-1484. In Russian. 17 refs. Levkovskii, V.P.

Tundra soils
Tundra vegetation
Plant ecology

28-2230

Tikhmenev, E. A., 1973:

Anthecology of some Salix species in Arctic tundra (Wrangel Island) (K antekologii nekotorykh vidov Salix v arkticheskoi tundra o. Vrangelie). Botanicheskii zhurnal, 1973, 58(8), p. 1209-1216. In Russian. 19 refs.

Tundra vegetation
Plant ecology
Arctic vegetation

28-1677

Tikhmenev, E.A., 1976:
Anthecology of Wrangel Island plants.
Bot Zh, 61(2): 164-176. In Russian. English summary.

NAL/CAIN

Tikhomirov, B.A., 1973:
Adaptation of plants to northern conditions. In Probl Biogeotsenologii Geogot Bot Geogr, p. 288-297. In Russian.

NAL/CAIN

Tikhomirov, B.A., 1971:
Biogeocenological studies of tundra (Osnovnye problemy i zadachi biogeotsenologicheskogo izucheniia tundry) Biogeotsenozy Taimyrskoi tundry i ikh produktivnost' (Biogeocenoses of Taymyr tundra and their productivity) Leningrad, Nauka, p. 7-16. In Russian with English summary. Refs.

27-1539

Tikhomirov, B.A. ed., 1970:
Ecology and Biology of plants of the East-European forest tundra (A detailed study of edafo-vegetational communities in the forest-tundra zone, Part I) (Ekologiya i biologiya rastenii Vostochnoevropeiskoi lesotundry (Opyt statsionarnogo izucheniia pochvenno-rastitel'nykh kompleksov lesotundry, chast' 1)). Rastitel'nost' Krainego Severa SSSR i ee osvoenie, 1970, Vol. 10, 356 p. In Russian with English table of contents. 340 refs.

Tikhomirov, B.A., ed., 1970

Forest tundra
Tundra soils
Tundra vegetation

26-1949

Tikhomirov, B.A., 1970:
Forest limits as the most important biogeographical boundary in the North. Ecology of the subarctic regions. Vol. 1 of Ecology and conservation. Paris, Unesco, 1970 p. 35-40. Numerous refs.

Subarctic vegetation
Forest ecosystems.
Taiga vegetation.

27-1827

Tikhomirov, B.A. et al., 1972:
General aspects of studying tundra and forest-tundra biocenoses (Obshchie aspekty izucheniia biogeotsenozov tundry i lesotundry). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 5-18. In Russian. Kishchinskii, A.A.

Forest tundra.
Tundra vegetation.
Plant ecology.

28-1246

Tikhomirov, B.A., 1971:
Peculiarities of the biosphere of the extreme north. Ottawa, Soil Research Institute, June 1972, 38 p. Unpublished manuscript. Translated from Priroda, 1971, No. 11:30-42. 27 refs.

Tundra vegetation
Ecology
Plants (botany)

28-2994

Tikhomirov, B.A. ed., 1972:
Soil and vegetation of the east European forest tundra. Pochvy i rastitel'nosti vostochnoevropeiskoi lesotundry. Rastitel'nost' Krainego Severa SSSR i ee osvnenie. 1972 Vol. 11. 335 p. In Russian with English table of contents. 186 refs. No microfiche available.

Forest tundra.
Tundra terrain.
Tundra soils.

27-2636

Tikhomirov, B.A., 1970:
Specific features of the zoocomponent of tundra biogeocenoses. Osobennosti zookomponenta biogeotsenozov tundry. Moskovskoe obshchestvo ispytatelei prirody. Trudy, 1970, Vol. 38, p. 172-183. In Russian with English summary. 38 refs.

Tundra soils.
Tundra vegetation.
Plant ecology.

27-306

Tikhomirov, B.A., 1974:
Specific features of the zoocomponent of tundra biogeocenoses. International Tundra Biome translation Jan. 1974 No. 10. 12 p. Translated from Trudy Moskovskogo Obshchestva Ispytateley Prirody, Moscow, vol. 38, p. 172-183, 1970. Refs. p. 10-12. For Russian original see 27-306.

Tundra soils
Tundra vegetation
Plant ecology

BROWN

Tikhomirov, B.A., 1972:

Structure of the relationship among components in biogeocenoses of tundra zone. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 98-101.

Tundra vegetation.
Ecosystems.

27-2661

Tikhomirov, B.A. et al., 1972:

Vegetation as a component of biocenoses in the Far North (Izucheniye rastitel'nosti kak komponenta biogeotsenozov Krainego Severa). Izucheniye biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 53-60. In Russian. 22 refs. Norin, B.N.

Arctic vegetation.
Plant ecology.
Arctic soils.

28-1255

Tikhonova, T.S., 1972:

Experience in mapping natural complexes of Dzhungarskiy Alatau (Opyt kartografirovaniya prirodnykh kompleksov Dzhungarskogo Alatau). Landshaftnoe kartografirovaniye i fiziko-geograficheskoe raionirovaniye gornyykh oblastei (Landscape mapping and physiographic zoning of mountain regions). N.A. Gvozdet'skii, ed. MGU, 1972, p. 191-207. In Russian. 10 refs.

Alpine soils.
Alpine vegetation.
Plant ecology.
USSR--Dzhungarskiy Alatau

28-734

Titov, E.V., 1971:

Cedar regeneration in the Altai Mountains (Vosstanovitel'nye protsessy v kedrovnikakh Gornogo Altaia). Akademiya nauk SSSR. Sibirskoe otdeleniye. Biologicheskii institut. Trudy po lesnomu khozhai-stvu Zapadnoi Sibiri. 1971, Vol. 9, p. 221-227. In Russian. 2 refs. SD95.A6.

Alpine soils.
Vegetation patterns.
Alpine vegetation.

28-124

Titov, E.V., 1973:

Forest regeneration processes in pinus sibirica cutting areas of the Altai. Tr Biol Inst. Akad Nauk SSSR Sibirsk Otd, 20:153-157. In Russian.

NAL/CAIN

Tolmachev, A.I. ed., 1971:

Arctic flora of the U.S.S.R.; critical review of vascular plants growing in Arctic regions; Part 6, caryophyllaceae-ranunculaceae (Arkticheskaya flora SSSR; kriticheskii obzor sosudistykh rastenii, vstrechayushchikhsia v arkticheskikh raionakh SSSR. Vyp. 6, semeistva caryophyllaceae-ranunculaceae). Leningrad, Nauka, 1971, 246 p. In Russian with English table of contents enclosed. No microfiche available. Akademiya nauk SSSR. Botanicheskii institut. QK474.A7

2

Tolmachev, A.I. ed., 1971

Arctic soils
Arctic vegetation
Plant ecology

26-3874

Tolmachev, A.I. et al., 1974:

New data on the flora of Franz-Josef Land (Novye dannye o flore zemli Frantsa-Iosifa). Botanicheskii zhurnal, Feb. 1974, 59(2), p. 275-279. In Russian. 6 refs. Shukhtina, G.G.

Arctic vegetation
Plant ecology

28-4226

Tolmachev, A. I. et al., 1973:

New species of Papaver from the far northeastern Asia (Novye vidy Papaver s krainego severo-vostoka Azii). Botanicheskii zhurnal, 1973, 58(8), p. 1127-1130. In Russian. Petrovskii, V.V.

Subarctic vegetation
Plant ecology
Subarctic soils

28-1675

Tolmachev, A.I., 1970:

Research on an isolated "forest island" in the Bol'shezemel'skaya tundra (Die Erforschung einer entfernten "Waldinsel" in der Grossland-Tundra). Colloquium geographicum, 1970, Vol. 12. Lauer, W. (ed), Argumenta geographic. Festschrift Carl Troll, p. 98-103. In German with English summary. 6 refs.

Forest tundra
USSR-Bol'shaya Zemlya

28-2566

Tomilin, B.A., 1975:

Adaptation of fungi to living conditions in the arctic and mycoflora of tundrae. Mikol Fitopatol, 8(6): 465-471. In Russian.

NAL/CAIN

Tomilin, B.A., 1971:

Data on geographical distribution and ecology of fungi in the Taymyr Research Station area (Nekotorye svedeniia o geograficheskom rasprostraneni i ekologii gribov Taimyrskogo Statsionara) Biogeotsenozy Taimyrskoi tundry i ikh produktivnost' (Biogeocenoses of Taymyr tundra and their productivity) Leningrad, Nauka, p. 130-137. In Russian with English summary. Refs.

27-1546.

Tomilin, B.A., 1972:

Studying fungi communities in tundra research stations (Stationarye mikotsenologicheskie issledovaniia v tundrach). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 73-79. In Russian. 21 refs.

Fungi.
Plant ecology.
Arctic soils.

28-1259

Tomirdiario, S.V., 1976:

Drainage of tundra lowlands for maximum development of meadows which form at the bottom of drained thermokarst lakes. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 23-24.

BROWN

Tomirdiario, S.V., 1975:

Evolution of thermokarst-lake landscapes of east Siberian plains and ground ice dynamics (Evoliutsiia ozerno-termokarstovykh landshaftov na ravninakh Vostochnoi Sibiri i dinamika podzemnogo oledeneniia) Soveshchanie po voprosam krugovorota veshchestva i enerfii v ozernykh vodoemakh, 2, Listvyanka (Irkutsk), Sept. 1-6, 1969. Krugovorot veshchestva i energii v ozernykh vodoemakh (Matter and energy cycle in lakes) Novosibirsk, Nauka, 1975 p. 402-406. In Russian. 1 ref.

30-964

Tomirdiario, S.V., 1972:

Permafrost and economic development of uplands and plains in the Magadan region and Yakutia (Vechnaia merzlota i osvoenie gornykh stran i nizmennosti (na primere Magadanskoi oblasti i IAkutskoi ASSR). Magadan, Magadanskoe knizh. izd-vo., 1972, 174 p. In Russian with English table of contents enclosed. Bibliog. p. 169-172.

Cryogenic processes.
Patterned ground.
Thermokarst.

28-924

Tonkonogov, V.D., 1975:

Effect of deflation on soil formation in western Siberian tundra. Pochvovedenie, 12: 23-31. In Russian. English summary.

NAL/CAIN

Tonkonogov, V. D., 1970:

Sandy podsoils of northern Taiga and forest tundra in the eastern Arkhangel'sk region. (Peschanye podzoly severnoi taigi i lesotundry vostoka Arkhangel'skoi oblasti) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 124-129. In Russian. 5 refs.

Forest tundra.
Soil formation.
Taiga soils.

26-1711

Trofimov, N.N., 1975:

Soil ecology and resources of the Kemerovo region (Ekologiya pochv i pochvennye resursy Kemerovskoi oblasti) Novosibirsk, Nauka, 300 p. (Pertinent p. 128-181) In Russian. Refs. p. 289-298.

30-3684

Trotsenko, G. V., 1973:

List of botanists studying tundra and forest tundra vegetation. Spisok botanikov, izuchaiushchikh rastitel'nyi mir tundry i lesotundry. Ekologiya 1973 No. 1. p. 109-112. In Russian.

Forest tundra.
Tundra.
USSR-Far North.

27-2610

Trotsenko, G.V., 1974:

Mosses and vascular plants of Kharp research station (Flora mkhov i sosudistykh rastenii statsionara "Kharp") Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1974 Vol.88 p. 30-48. In Russian. 28 refs.

30-443

Trotsenko, G.V., 1972:

Phytomass reserves in some types of tundras near the northern Ob' River. Zapasy fitomassy v nekotorykh tipakh tundr priobskogo Severa. Ekologiya. 1972 No. 5. p. 90-93. In Russian. 3 refs.

Tundra soils.
Tundra vegetation.
Biomass.

27-2353

Trotsenko, G.V., 1974:

Quantitative studies of dwarf shrub formation with *betula nana* at Kharp research station (Kolichestvennoe isuchenie eraikovykh soobshchestv statsionara "Kharp") Akademiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy 1974 Vol. 88. p. 108-120. In Russian. 6 refs. Martin, I.U.L.

30-450

Trush, N.I. et al., 1973:

Composition and properties of deposits in the glacial complex of the Iana-Indigirka interfluve (Sostav i svoistva otlozhenii ledovogo kompleksa Iano-Indigirskogo mezhdurech'ia). Merzlotnye issledovaniia, 1973, Vol. 13, p. 43-55. In Russian. 8 refs. Nistratova, T.A.

Clay soils
Soil composition
Soil profiles

28-2542

Tsvetkov, V.F., 1972:

Forest fires and young growth in the lichen Taiga of the Kola Peninsula. Lesnye pozhary i formirovanie moldniakov v lishainikovykh borakh Kol'skogo poluoostrova. Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Izvestiia vysshikh uchebnykh zavedenii. Lesnoi zhurnal. 1972 No. 5. p. 34-37. In Russian. 9 refs.

Taiga soils.
Taiga vegetation.

27-2325

Tsydypov, D. Ch., 1973:

Change of vegetation in the alpine-steppe pastures of the Buriat Region due to grazing. In Okhrana Gornykh Landshaftov Sibiri, p. 144-147. In Russian.

NAL/CAIN

Tsypanova, A.N., 1970:

Seasonal variations and migration of some mobile compounds in the southern tundra soils in the European U.S.S.R. (Sezonnye izmeneniia i migratsiia nekotorykh podvizhnykh soedinenii v pochvakh iuzhnoi tundry evropeiskoi chasti SSSR) Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 141-147. In Russian. 5 refs.

Tsypanova, A.N., 1970:

Forest tundra.
Tundra soils.
Soil composition.

26-1714

Turmanina, V.I., 1974:

Morphological and anatomical characteristics of krumholz in relation to snow and avalanche action (Morfologo-anatomicheskie osobennosti krivolesii v svias s deiatel'nost'iu snega i lavin) Akademiia nauk SSSR. Institut geografii. Materialy gliatsiologicheskikh issledovaniia. Khronika obsuzhdeniia 1974 No. 24 p. 207-211. In Russian with English summary. 18 refs. Akif'eva, K.V.

30-2851

Tyrtikov, A.P., 1970:

The change of thin forests into tundras in western Siberia. Moscow Univ Vestnik Ser 6 Biol Pochvoved, 4:46-52. In Russian.

NAL/CAIN

Tyrtikov, A.P., 1973:

Permafrost and vegetation (Vechania merzlota i rastitel'nost'). International Conference on Permafrost, 2nd, Yakutsk, 1973, Vol. 2, p. 68-74. In Russian. 9 refs.

Tundra soils.
Tundra vegetation.
Forest tundra.

28-1038

Tyrtikov, A.P., 1976:

Protection of vegetational cover in permafrost areas. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 25-26.

BROWN

Tyrtikov, A.P., 1973:

Soil thawing in the West Siberian tundras (Protaivanie gruntov v tundrach Zapadnoi Sibiri) Prirodnye usloviia Zapadnoi Sibiri, 1973, Vol. 3, p. 160-169. In Russian. 3 refs.

Tundra terrain.
Tundra soils.
Active layer.

28-271

Tyrtikov, A.P., 1972:

Studying soil erosion and thermokarst in relation to vegetation dynamics (Izuchenie erozii i termokarsta v sviazi s dinamikoi rastitel'nogo pokrova). Izuchenie biogeotsenozov tundry i leso-tundry (Study of tundra and forest-tundra biocenoses) Leningrad, Nauka, 1972, p. 38-40. In Russian.

Tundra vegetation.

28-1250

Tyrtikov, A.P., 1973:

Vegetation as an indicator of the composition and properties of soils in the light forests of West Siberia (Rastitel'nyi pokrov--indikator sostava i svoistv gruntov v podzone redkostoinykh lesov Zapadnoi Sibiri) Prirodnye usloviia Zapadnoi Sibiri, Vyp. 4 (Natural conditions in West Siberia, Vol. 4) Edited by A.I. Popov Moscow, Universitet, p. 70-81. In Russian. 18 refs.

29-1216

Tyrtikov, A.P., 1970:

Vegetation effect on the freezing and thawing of soils in the Siberian forest tundra (Vliianie rastitel'nogo pokrova na protaivanie i promerzanie pochv v Sibirskoi lesotundre). Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North). Syktyvkar, Komi knizhnoe izd-vo, 1970, p. 181-186. In Russian. 1 ref.

Tyrtikov, A.P., 1970

Forest tundra
Tundra soils
Tundra vegetation

26-1722

Tyrtikov, A.P., 1974:

Vegetational cover dynamics and permafrost development in west Siberia (Dinamika rastitel'nogo pokrova i razvitie vechnoi merzloty v Zapadnoi Sibiri) MGU, 198 p. In Russian with English table of contents enclosed. Refs. p. 193-197.

29-1415

Ukhacheva, V.N., 1972:

Flora of the Shadput region, Pamirs. Osobennosti flory i rastitel'nosti Shadputskogo raiona Pamira. Leningrad. Universitet. Vestnik. Biologiya. Nov. 1972 21(4). p. 64-72. In Russian with English summary. 9 refs.

Alpine soils.
Alpine vegetation.
Plant ecology.

27-2196

Ukhacheva, V.N., 1972:

Targyl steppes of the east Pamirs. Vses Geogr Obshch Izv, 104(4): 301-305. In Russian. Pogorelovskaia, T.S.

NAL/CAIN

Ukhacheva, V.N., 1973:

Type of plants called "Cryophilic cushions" (O tipe rastitel'nosti "kriofil'nye podushechniki"). Leningrad. Universitet. Vestnik. Biologiya, May, 1973 2(9), p. 58-64. In Russian. 53 refs.

Alpine vegetation.
Plant ecology.
Alpine soils.
USSR--Tien Shan.

28-1286

Urusevskaia, I.S., 1974:

Characteristics of the composition and properties of the humus of soddy calcareous soils in the taiga-forest zone. I. Contents and qualitative composition of the humus. Nauch Dokl Vyssh Shk, Biol Nauk 4: 120-126. In Russian. Ammosova, I.A.M.; Pugacheva, I.G.

NAL/CAIN

(Lockheed)

Urushadze, T.F., 1970:

Characteristics of soils of alpine belt of eastern Pamir. Leningr Univ Vestnik Ser Biol, 4: 160-166. In Russian. English Summary. Ukhacheva, V.N.

NAL/CAIN

Urushadze, T.F., 1973:

The composition of humus in the sub-alpine forest soils of Georgia. Soobshch Akad Nauk Gruz SSR, 70(1): 161-163. In Russian. English summary. Mkheidze, E.A.

NAL/CAIN

Urushadze, T.G., 1972:

Micromorphology of soils in subalpine forests (K voprosu o mikromorfologii pochv subal'piiskikh lesov). Akademiia nauk Gruzinskoii SSR, Tiflis. Soobshcheniia, Jan. 1972, 65(1), p. 125-128. In Russian with English and Georgian summaries. 2 refs.

Alpine soils
Alpine vegetation

26-3398

Urushadze, T.F., 1972:

Subalpine forest soils of Georgia. (USSR) Pochvovedenie, 6: 29-43. In Russian.

NAL/CAIN

Uspenskii, S.M., 1972:

Birds in biocenoses of the Far North (Methods and trends in the investigations) (Ptitsy v biogeotsenozakh Krainego Severa (osnovnye napravleniia i metodika issledovaniia). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 117-121. In Russian. 22 refs.

Arctic vegetation.
Plant ecology.
Ecosystems.

28-1267

Uspensky, S.M., 1975:

Protection of natural complexes of the Arctic and sub-Arctic. XXIII International Geographical Congress. Symposium: Geography of Polar Countries. Tour K-29. Leningrad, Hydrometeorological Publishing House, 1975. p. 126-128.

BROWN

Uvarkin, I.U.T., 1973:

History of thermokarst development in the Arctic tundra of West Siberia (Kistorii razvitiia termokarstovykh obrazovaniia v arkticheskoi tundre Zapadnoi Sibiri). Paleokriologiya v chetvertichnoi stratigrafii i paleogeografii (Paleocryology in Quaternary stratigraphy and paleogeography). Moscow, Nauka, 1973, p. 60-65. In Russian. 6 refs.

Arctic terrain
Tundra
Thermokarst

28-1961

Uvarov, L.A., 1972:

On the redistribution of moisture by soil surface in the alpine meadow-forest region of the Ukrainian Carpathians. Lesovod Agrolesomelior 31: 60-65. In Russian. D'iakov, V.N.

NAL/CAIN (Lockheed)

Vainshtein, E.A., 1973:

Some problems of lichen physiology. II. Photosynthesis (Nekotrye voprosy fiziologii lishainikov. II. Fotosintez). Botanicheskii zhurnal, March 1973, 58(3), p. 454-464. In Russian. 67 refs.

Lichens.
Photosynthesis.

28-39

Vakurov, A.D., 1975:

Forest fires in the north (Lesnye pozhary na severe) Moscow, Nauka, 99 p. In Russian with English table of contents enclosed. Refs. p. 96-99.

30-625

Vakurov, A. D., 1973:

Growth of pine forests after fires in the far north (Rost poslepozharnykh sosniakov v usloviakh Severa). Russia. Ministerstvo vysshego i srednego spetsial'nogo obrazovaniia. Izvestiia vysshikh uchebnykh zavedeniia. Lesnoi zhurnal, 1973, No. 4, p. 157-158. In Russian. 8 refs.

Taiga soils
Taiga vegetation

28-2508

Vakurov, A.D., 1973:

Pine forest biomass in the northern taiga subzone (Produktivnost' sosniakov v podzone severnoi taigi) Produktivnost' organicheskoi massy lesov v raznykh prirodnykh zonakh (Productivity of organic mass of forests in different natural zones) Moscow, Nauka, p. 7-27. In Russian. 4 refs.

30-2218

Vasil'ev, N.G., 1974:

Characteristics of the alpine plant distribution on the Arsenyev Mountain ridge (central Sikhote-Alin Range). Probl Bot (Leningr), 12: 111-117. In Russian. Kolesnikov, B.P.

NAL/CAIN

Vasil'ev, P.V. et al., 1973:

Forestry problems in the near north of the USSR (Problemy lesnogo khoziaistva v raionakh Blizhnego Severa SSSR). Problemy severa, 1973, Vol. 18, p. 32-49. In Russian. 17 refs. Shaposhnikova, L.A.

Taiga vegetation

28-3742

Vasilevich, V.I. et al., 1973:

Effects of some environmental factors on subalpine meadow vegetation. Nekotorye dannye o svyazi rastitel'nosti subal'piiskogo luga s faktorami sredy. Botannicheskii zhurnal. Fe. 1973 58(2). p. 231-237. In Russian. 18 refs. Liatifova, A.Kh.

Alpine vegetation.

Alpine soils.

Plant ecology.

27-2343

Vasil'evskaia, V.D., 1975:

Agapa, USSR. Sweden. Statens naturvetenskapliga forskningsrad. NFR ecological bulletins 1975 No.20 International Meeting on Biological Productivity of Tundra, 5th: IBP Tundra Biome, Abisko, Sweden, April 16-24, 1974. Structure and function of tundra ecosystems, edited by T. Rosswall and O.W. Heal p. 141-158. 7 refs. Ivanov, V.V.; Bogatyrev, L.G.; Pospelova, E.B.; Shalaeva, N.M.; Grishina, L.A.

30-2201

Vasil'evskaia, V.D., 1974:

Dynamics of some properties of the Tareya station soils (west Taymyr) (Dinamika nektorykh svoistv pochv stacionara "Tareia" (Zapadnyi Taymyr)) Biologicheskie problemy Severa, VI simpozium; Vypusk 6 (Biological Problems of the North, 6th symposium; Vol.6) Yakutsk, Akademiia nauk SSSR, p. 41-46. In Russian. Tables. Solodikhina, G.A.

29-1067

Vasil'evskaia, V.D., 1970:

Microelements in soils of western Taymyr. Moscow Univ Vestnik Ser 6 Biol Pochvoved, 4: 53-59. In Russian. Bogatyrev, L.G.
(Same as CRREL 25-2781)

NAL/CAIN

Vasil'evskaia, V.D. et al., 1972:

Micromorphological features of Taymyr tundra soils. Midromorfologicheskie osobennosti tundrovyykh pochv Taymyra. Moscow. Universitet. Vestnik, Seria 6. Eiologiya i pochvovedenie. Sept.-Oct. 1972 No. 5. p. 76-82. In Russian with English summary. 7 refs. Ivanov, V.V. Shoba, S.A.

Tundra soils.

Tundra vegetation.

Soil composition.

USSR-Taymyr.

27-2345

Vasil'evskaia, V.D., 1972:

Natural conditions and soils of the "Agapa" station, West Taymyr (Pochvy i produktivnost' rastitel'nykh soobshchestv. Vyp. 1 (Soils and productivity of plant communities. Vol. 1) Moscow, MGU, p. 15-54. In Russian, 36 refs. Ivanov, V.V.; Bogatyrev, L.G.

27-1227

Vasil'evskaia, V.D. et al., 1973:

Natural conditions and soils of "Agapa" station (western Taymyr). U.S. Army Cold Regions Research and Engineering Laboratory, July 1973, TL 381, 40 p. AD-764 804. For Russian original see 27-1227. 38 refs. Ivanov, V.V., Bogatyrev, L.G.

Tundra soils

Tundra vegetation

Soil formation

28-3473

Vasil'evskaia, V.D., 1973:

Natural conditions and soils of "Agapa" Station (Western Taymyr). International Tundra Biome Translation Sept. 1973 No. 9. 2^o p. Translated from Soils and Productivity of Plant Communities, Moscow University Press, No. 1, p. 15-54, 1972.

BROWN

Vasil'evskaia, V.D. et al., 1972:

Organic carbon reserves in the conjugate eluvial accumulative landscapes of west Taymyr (station Agapa). International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 215-218. Grishina, L.A.

Vasil'evskaia, V.D. et al., 1972:

Tundra soils.
Organic soils.
Biological productivity.

27-2683

Vasil'evskaia, V.D., 1972:

Programme and results of biocenological research at the Taimyr Station Agapa. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee. April 1972. p. 201-203.

Tundra soils.
Tundra vegetation.

27-2679

Vasil'evskaia, V.D. et al., 1972:

Soil temperature regime in certain tundra types at the Agapa station during the growing season. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F. E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee, April 1972. p. 219-228. Pospelova, E.B. Bogatyrev, L.G. Ivanov, V. V.

Tundra soils.
Soil temperature.

27-2684

Vasil'evskaia, V. D., 1974:

Soil temperature regime of several types of tundra at Agapa station during the growing season (Temperaturnyi rezhim pochv nekotorykh tipov tundr statsionara "Agapa" v techenie vegetatsionnogo perioda) Pochvy i produktivnost' rastitel'nykh soobshchestv. Vyp 2 (Soils and productivity of plant associations. Vol. 2) Moscow, MGU, p. 23-47. 14 refs. In Russian. Pospelova, E.B.; Ivanov, V.V.; Bogatyrev, L.A.

29-3324

Vasil'evskaia, V.D. et al., 1972:

Studying tundra soils as components of tundra biocenoses (Izuchenie pochv tundr kak komponenta tundrovyykh biogeotsenozov). Izuchenie biogeotsenozov tundry i lesotundry (Study of tundra and forest-tundra biocenoses). Leningrad, Nauka, 1972, p. 26-32, In Russian. 18 refs. Ignatenko, I.V.

Soil formation.
Tundra vegetation.
Soil moisture.

28-1248

Vasil'evskaia, V.D., 1971:

Tundra gley soils in the valley of the River Piasina (western Taimyr). Pochvovedenie, 11:8-19. In Russian. English summary. Ivanov, V.V.
Same as CRREL 27-1552.

NAL/CAIN

Vereshchagina, I.V., 1971:

Characteristics of the thermal regime of soils in the zone of overwintering of ornamental perennials in the Altai region. In Klimat pochvy; Doklady, p. 140-145. In Russian.

NAL/CAIN

Vereshchagina, I.V., 1970:

Soil climate control and the possibility of growing perennial plants wintering underground (Melioratsia pochvennogo klimata i vozmozhnost' kul'tury zimuiushchikh v grunte mnogoletnikov). Geograficheskoe obshchestvo SSSR. Zabaikal'skii filial. Izvestiia, 1970, 6(4), p. 36-43. In Russian. 11 refs.

Alpine vegetation
Soil temperature
Alpine soils

26-3591

Vital', A.D., 1976:

Root systems of sodding plants and their significance for restoration of vegetational cover damaged during economic development of lands. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 11-12.

BROWN

Vodop'ianova, N.S., 1974:

Flora of alpine tundra in the neighborhood of the Bogatyr' Lake (The Putorana Plateau, the northern part of lands east of the Yenisey River) (Gol'tsovaia flora okrestnostei ozera Bogatyr' (Plato Putorana, Zheniseiskii Sever)) Botanicheskii zhurnal June 1974 59(6) p.883-894. In Russian. 17 refs. Krogulevich, K.E.

29-1294

Vomperskaia, M.I., 1972:

Water regime of peat-gley forest soils drained with burrows (Vodnyi rezhim torfianisto-gleevykh lesnykh pochv pri osushenii borozdami). *Lesovedenie*, May-June, 1972, No. 3, p. 17-29. In Russian with English summary. 15 refs.

Taiga soils.
Taiga vegetation.
Soil profiles.

28-1299

Voroshilov, G.D., 1973:

Effect of coagulants on frost heave intensity in clayey and sandy loams of the Far East (Vliianie veshchestv-koagulyatorov na velichinu moroznogo pucheniia dal'nevostochnykh supesei i suqlinkov). International Conference on Permafrost, 2nd, Yakutsk, 1973 1973, Vol. 4, p. 74-78. In Russian.

Clay soils.
Soil moisture migration.

28-1084

Votiakov, I.N., 1973:

Textural transformations in frozen ground caused by changing temperature (Strukturnye preobrazovaniia v merzlykh gruntakh pri izmenenii ikh temperatury). International Conference on Permafrost, 2nd, Yakutsk, 1973 1973, Vol. 4, p. 78-82. In Russian.

Soil moisture migration.

28-1085

Vstovskaia, T.N., 1975:

Prospects introducing arboreal plants from Amur-Primorskiy kray into the southern regions of west Siberia (O perspektivakh introduktsii drevesnykh rastenii Amuro-Primorskoii geograficheskoi strany v iuzhnye raiony Zapadnoi Sibiri) *Akademiia nauk SSSR. Sibirskoe otdelenie. Izvestiia. Seriya biologicheskikh nauk* Apr. 1975 No.5 p. 35-42. In Russian with English summary. 39 refs.

30-3122

Wielgolaski, F.E. ed. & Rosswall, T. ed., 1972:

Tundra Biome: Proceedings IV. International Meeting on the biological productivity of tundra, Leningrad USSR, October 1971.

International Biological Programme. Stockholm, Tundra Biome Steering Committee, 1972. 320 p.

Tundra Biome.

27-2653

Wielgolaski, F.E., 1973:

Vegetation types and biomass of tundras (Tipy rastitel'nosti i biomassa rastenii tundry). *Ekologiya*, 1973, No. 2, p. 19-36. In Russian. 29 refs.

Plant ecology.
Tundra vegetation.
Biomass.

28-324

Wielgolaski, F. E., 1971:

Vegetation types and primary production in tundra. International Biological Programme, Tundra biome: Proceedings IV. International Meeting on the Biological Productivity of Tundra, Leningrad USSR, October 1971. Edited by F.E. Wielgolaski and Th. Rosswall. Stockholm, Tundra Biome Steering Committee, April 1972. p. 9-34. 31 refs.

Tundra vegetation.
Lichens.

27-2654

Zaboeva, I.V., 1973:

Biological productivity of picea-hylocomium forests of the central and northern taiga region of the Komi ASSR. *Rastitel Resursy*, 9(1): 100-106. In Russian. Rusanova, G.V.; Sloboda, A.V.

NAL/CAIN

Zaboeva, I.V. et al., 1973:

Biomass of spruce forests in the northern and central taiga of the Komi ASSR (Bioproduktivnost' el'nikov zelenomoshnikov srednei i severnoi taigi Komi ASSR). *Rastitel'nye resursy*, 1973, 9(1), p. 100-106. In Russian. 9 refs. Rusanova, G.V., Sloboda, A.V.

Taiga vegetation
Plant ecology
Biomass

USSR--Komi ASSR

28-2614

Zaboeva, I.V., 1974:

Genetic features of typical strongly podzolized and gley-podzol soils of the taiga zone in the Komi ASSR. *Trans Int Congr Soil Sci*, 10th (v.6, pt.1): 135-141. In Russian. English summary. Sloboda, A.V.; Rusanova, G.V.

NAL/CAIN

Zaikova, V.A., 1973:

Studying allelopathic regime of grassland phytocoenoses in Karelia (Opyt izucheniia allelopaticheeskogo rezhima v lugovykh fitotsenozakh Karelii). *Botanicheski zhurnal*, Dec. 1973, 58(12), p. 1753-1760. In Russian. 15 refs.

Meadow soils
Vegetation
USSR-Karelia

28-2235

Zakharov, I.U. T., 1975:

Environmental protection in the northern parts of West Siberia subject of intensive industrial development. *Environment Protection in Relation to Economic Development of Permafrost Regions*. Abstracts of Papers presented at a Conference. p. 22-23. In Russian.

BROWN

Zalenskii, O.V. et al., 1972:

Photosynthesis in some plants of western Taimyr. International biological programme, tundra biome; proceedings IV. International meeting on the biological productivity of tundra, Leningrad USSR, October 1971. Edited by F. E. Wielgolaski and Th. Rosswall. Stockholm, tundra biome steering committee. April 1972. p. 182-186. 1 ref. Shvetsova, V.M. Voznesenskii, V.L.

Tundra vegetation.
Photosynthesis.

27-2674

Zamolotchikova, S.A., 1974:

Frost heave and soil settlement in the active layer of the Lena-Vilyuy interfluvium (Puchenie i osadka porod sloia sezonnogo ottaivaniia na Leno-Viliuiskom vodorazdele) *Merzlotnye issledovaniia* 1974 Vol.14 p. 148-153. In Russian. 6 refs.

29-2311

Zarubin, Z.M. et al., 1970:

Using east Siberian woody plants for afforestation of the Irkutsk region (Ispol'zovanie vostochnosibirskikh drevesnykh rastenii v ozelenenii Irkutskoi oblasti). *Glavnyi botanicheski sad. Biulleten'* 1970 Vol. 76 p. 30-31. In Russian. 7 refs. Dubovik, M.I.; Chernyshova, L.I.

Subarctic soils.
Subarctic vegetation.

26-435

Zharkova, Yu. G., 1975:

Impact of certain anthropogenic factors on tundra complexes of European North of the USSR. XXIII International Geographical Congress. Symposium: Geography of Polar Countries. Tour K-29. Leningrad, Hydro-meteorological Publishing House, 1975. p. 132-k33.

BROWN

Zhigarev, L.A., 1976:

Disturbances in natural equilibrium due to mining in northern Siberia. Symposium on Environmental Protection in Relation to Economic Development of Permafrost Regions. CRREL TL 518, p. 34-35.

BROWN

Zhivilko, Z.N., 1970:

Observations of the agricultural-meteorological stations in tundra and forest tundra (Statsionarnye na territorii tundry i lesotundry) *Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa* (Biological basis for the utilization of natural resources in the North) Syktyvkar, Komi knizhnoe izd-vo, 1970 p. 167-171. In Russian. 3 refs.

Forest tundra.
Tundra soils
Tundra vegetation.

26-1719

Zhuchkova, V.K., 1972:

Landscape map of the Khibiny Mountains (Landshaftnaia karta Khibinskogo gornogo massiva). *Landshaftnoe kartografirovaniie i fiziko-geograficheskoe raionirovaniie gornykh oblastei* (Landscape mapping and physiographic zoning of mountain regions) N.A. Gvozdetkii, ed. MGU, 1972, p. 220-232. In Russian. 9 refs.

Tundra soils.
Alpine vegetation.
USSR--Khibiny Mountains

28-736

Zhukov, A. M., 1973:

Camarops polyspermum (Montagne) Miller on sea-buckthorn in the flood plain of the Katun' River (Altai region) (*Camarops polyspermum* (Montagne) Miller na oblepikhe v poime r. Katun' (Altaiskii Krai)). *Novosti geografii i sistematiki rastenii Sibiri* (Geography and taxonomy of Siberian vegetation), ed. by A. P. Skabichevskii. Novosibirsk, Nauka, 1973, p. 111-114. In Russian. 2 refs.

Fungi

28-2713

Zhukov, A.M., 1972:
On the mycoflora of the coniferous taiga of Salair. In *Vodorosli i griby Sibiri i dal'nego vostoka*, 2(4): 166-177. In Russian.

NAL/CAIN

Zhuikova, I.V., 1972:
Morphogenetic peculiarities of trellis bushes in the alpine tundras of the Khibiny Mountains (Ob osobennostiakh morfogeneza mekotorykh rastenii - predstavitelei zhiznennykh form "shpalernye kustarniki" v gornyykh tundrakh Khibin) *Vsesoiuznyi simpozium po biologicheskim problemam Severa*, 5th, Magadan, Apr. 18-22, 1972. *Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR)* p. 239-243. In Russian with English summary. 3 refs.
30-699

Zhukova, A.L., 1973:
Composition and Distribution of liverworts in the plant communities of the Taymyr station district (Vidovoi sostav i raspredelenie pechonochnyykh mkhov v rastitel'nykh soobshchestvakh raiona Taimyrskogo statsionara). *Biogeotsenozy Taimyrskoi tundry i ikh produktivnost'*. Vyp. 2 (Biogeocenoses of Taymyr tundra and their productivity. Vol. 2). Leningrad, Nauka, 1973, p. 120-127. In Russian with English summary. 11 refs.

Tundra vegetation
Mosses
Tundra soils

28-4115

Zhukova, A.L., 1973:
Floral analysis of the liverleaf moss Hepaticae from Franz-Josef land (Floristicheskii analiz pechenochnyykh mkhov Hepaticae zemli Frantsa-Iosifa). *Botanicheskii Zhurnal*, April 1973, 58(4), p. 528-539. In Russian.

Mosses.
Arctic vegetation.
Vegetation patterns.
USSR--Franz Josef Land.

28-38

Zubareva, R.S., 1973:
On the efficient utilization of alpine forests of the Urals. In *Okhrana Gornyykh Landshaftov Sibiri*, p. 70-78. In Russian. Kolesnikov, B.P.; Smolnogradov, E.P.; Fil'roze, E.M.

NAL/CAIN

Zubareva, R.S., 1972:
Soil and vegetation of the topographic-ecological profiles of southern taiga and the Transural foothills (Pochvenno-lesoras-titel'nye usloviia na topoekologicheskikh profiliakh iuzhnoi taigi predgornogo Zaural'ia) *Adakemiia nauk SSSR. Ural'skii filial. Institut ekologii rastenii i zhivotnykh. Trudy* 1972 Vol. 85. p. 88-107. In Russian. 5 refs. Firsova, V.P.; Shadrina, N.I.

29-1229

Zubets, V.M. et al., 1973:
Theoretical study of water regime control in drained peat soils (Teoreticheskie issledovaniia regulirovaniia vodnogo rezhima na osushaemykh torfiano-bolotnykh pochvakh). Minsk. Belorusskii nauchno-issledovatel'skii institut melioratsii i vodnogo khoziaistva. *Trudy*, 1973, Vol. 21, p. 3-12. In Russian. 5 refs. Afanasik, G.I.

Peat
Soil moisture migration

28-2621

Zvereva, T.S., 1975:
The character of organic substance of soddy-podzolic soils of the Malaya Severnaya Dvina Valley. *Nauch Dokl Vyssh Shk Biol Nauk*, 1: 119-126. Aleksandrova, T.B. In Russian.

NAL/CAIN

Zvereva, T.S., 1974:
Clay minerals in some soils of the Taymyr peninsula (Glinisty mineraly nekotorykh pochv poluostrova Taimyr) *Biologicheskie problemy Severa*, VI simpozium; Vypusk 6 (Biological Problems of the North, 6th symposium; Vol.6) Yakutsk, Akademiia nauk SSSR, p. 134-140. In Russian. Ignatenko, I.V.

29-1074

Zvereva, T.S., 1972:
Conditions for weathering and transformation of clay minerals in various sub-zones of east European tundra soils (Usloviia vyvetrivanii i transformatsii glinistykh mineralov v pochvakh razlichnykh podzon vostochnoevropeiskoi tundry) *Vsesoiuznyi simpozium po biologicheskim problemam Severa*, 5th, Magadan, Apr. 18-22, 1972. *Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR)* p. 82-91. In Russian with English summary. 13 refs.

30-684

Zvereva, T.S., 1972:

Field studies of the micromorphology of several soils in the central forest reserve (Polevoe izuchenie mikromorfologii neskol'kikh pochv tsentral'nogo lesnogo zapovednika). Vsesoiuznaia akademiia sel'skokhoziajstvennykh nauk. Tsentral'nyi muzej pochvovedeniia. Sbornik trudov, 1972, Vol. 5. Geografiia, genesis i plodorodie pochv (Geography, formation and fertility of soils), p. 145-152.

Peat.
Soil formation.

28-367

Zvereva, O.S., 1970:

Limnological zonality and intrazonality in the far north (Problemy zonal'nosti i intrazonal'nosti v limnologii Krainego Severa). Akademiia nauk SSSR. Komi filial. Institut biologii. Biologicheskie osnovy ispol'zovaniia prirody Severa (Biological basis for the utilization of natural resources in the North). Syktyvkar, Komi knizhnoe izd-vo, 1970, p. 244-248. In Russian. 16 refs.

Vegetation
Plant ecology
Tundra soils
26-1725

Zvereva, T.S., 1972:

Variations in mineral composition of tush tundra soils developed on different rocks (Izmeneniia mineralogicheskogo sostava pochv kustarnikovoii tundry razvitykh na raznykh porodakh) Vsesoiuznyi simposium po biologicheskim problemam Severa, 5th, Magadan, Apr. 18-22, 1972. Pochvy i rastitel'nost' merzlotnykh raionov SSSR (Soil and vegetation of permafrost regions in the USSR) p. 92-98. In Russian with English summary. Ignatenko, I.V.

30-685

Zvorykina, K. V., 1973:

Characteristics of the structure of the grass and shrub layer of pine forests (Nekotorye osobennosti struktury traviano-kustarnichkovogo iarusy sosniakov). Produktivnost' i struktura rastitel'nosti molodykh sosniakov (Productivity and structure of the vegetation in young pine forests). Moscow, Nauka, 1973, p. 87-109. In Russian. Refs. p. 107-109.

Forest ecosystems
Vegetation patterns
Soil composition
28-2152