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MOSQUITO INFORMATION MANAGEMENT PROJECT (MIMP):  
APPLICATION OF A COMPUTERIZED GENERAL PURPOSE  
INFORMATION MANAGEMENT SYSTEM (SELGEM) TO MEDICALLY  
IMPORTANT ARTHROPODS (DIPTERA: CULICIDAE)

Final Report

Terry L. Erwin

April 1989

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<p>✓ This project was established in October 1979, to develop a computer-based systematic and ecological computer file (data bank) for the approximately one million mosquito specimens in the National Museum of Natural History collection. This collection is the largest and most complete mosquito collection in the world and represents a national treasure. The data management system, SELGEM (Self-Generating Master), was selected as the primary storage/management system. Data recorded on collection forms are submitted to a Honeywell Series 60 Level 66/80 computer via a Nixdorf 600/55 minicomputer. (GC/AW)</p>			
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## Body of Report

### 1984

During this report period, data from an additional 5,302 collection forms, representing 85,793 specimens, were entered into the computer database.

Development continued on the seven separated geographic files, incorporating data for Mexico and Central America, South America, the Caribbean Region, and Eastern Africa. A new file was started for the Middle East. The file for South America was made current with the entry of collection data for the final country, Brazil.

### 1983

During this report period data from an additional 4,543 collection forms, representing 116,698 specimens, were entered into the computer.

Development continued on the seven separate geographic files, incorporating data for Mexico and Central America, South America, the Caribbean Region and Eastern Africa. The file for Mexico and Central America was made current with the entry of collection data for the final country, Mexico. Emphasis switched from Central America to entering collection information into the database for South American countries.

In addition, the size of the world map collection was increased through acquisition to over 11,300 maps.

### 1982

During this report period an additional 3,173 collection records, representing roughly 126,000 specimens, were entered into the database. Of this total, 1,860 collections and 74,000 specimens were processed during the last four month period after the addition of a second staff member.

The development of separate geographic files continued with the addition of an Eastern Africa file and the near completion of data entry for the Central America file. A total of 7 files were initiated thus far, incorporating data for Central America, South America, the Caribbean Region and Eastern Africa.

1981

Input of the 1,939 collection records pertaining to the Albimanus Section of the subgenus Nyssorhynchus of Anopheles and all associated species was completed. Also, about 1,100 specimens and 540 collection forms, of the project Mosquitoes of Middle America (MOMA), for Panama and Colombia, respectively, were entered into the database. Six separate files were established, based on geographic groupings, for the countries of Middle and South America.

MIMP acquired, through the transfer of the MOMA collection from UCLA to the Smithsonian, about 5,000 topographic maps and 11,400 collection forms.

A manuscript was completed that describes MIMP, its objectives, capabilities, and limitations.

1980

1. Developed SELGEM program and master file with assistance of Office of Computer Services.
2. Established the following computer files:
  - a. collectors
  - b. depositories
  - c. countries
3. Completed data entry and corrections for Ecuador file.
4. Attained ability to answer a variety of specialized questions regarding mosquito distribution and ecology using SELGEM file.
5. Compiled reprint file of papers pertinent to project.
6. Initiated correction and validation of collection forms and published information of Nysserhynchus collections.
7. Established interface between SELGEM and MILREF (a software program designed to convert Military grid reference coordinates to Geographic coordinates).



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1979

1. Developed standardized collection form to assist in data entry—expanded and combined features of collection forms of Mosquitoes of Middle America (MQMA) and Medical Entomology Project (MEP).
2. Collection form was programmed and established on ENTIREX 600 (data entry system) for more rapid data entry—programming was assisted by Office of Computer Services, Smithsonian Institution (SI).
3. In process of developing SELGEM program and master file with assistance of Office of Computer Services.
4. Field collection forms corrected, validated and updated using original specimens from the National Museum Mosquito Collection and topographical maps for the following countries:
  - Ecuador
  - Columbia

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