

A PERSONAL ACCOUNT OF PROGRAMS TO ERADICATE THE SCREWORM IN THE UNITED STATES AND MEXICO WITH SPECIAL EMPHASIS ON THE FLORIDA PROGRAM

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ABSTRACT

The great saga of the eradication of the screwworm first from Curacao and then from all of North and Central America is recounted with special emphasis on activities in Curacao and Florida from 1951 through 1959. The author, who worked as a research scientist on all aspects of laboratory and field research and operations, brings to light many biological and operational problems along with corresponding solutions, which are not treated in the published accounts of USDA administrators involved in these programs.

Curacao served as a 170 square mile outdoor laboratory for developing the sterile insect technique. This setting permitted quantitative determination of the dynamics of the wild population, and the overflooding ratios and dispersal patterns essential for population suppression. The attack on the wild population during the time of year when it naturally undergoes decline proved to be essential in achieving eradication with minimal resources.

The Florida programs yielded three extremely important findings. The first is that eradication is greatly facilitated by taking advantage of severe weather events which reduce the range and density of the target population. Secondly eradication cannot be readily attained merely by the release of sexually sterile insects, since it is absolutely essential that producers simultaneously attack the immature stages by diligent inspection and treatment of wounds. Thirdly the leadership of the producer clientele is critically important to securing program resources from livestock owners, the State Legislature and the Congress. These lessons were corroborated repeatedly as the program dealt with the southwestern USA, Mexico and the Central American countries.

Key Words: Screwworm, *Cochliomyia hominivorax*, sterile insect technique, eradication, Curacao, history

The full text of this document can be viewed at: <http://www.flaentsoc.org/baumhover1997annmeet.html>
