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PRESERVATION OF NONHUMAN PRIMATES AND THEIR UTILIZATION  
FOR BIOMEDICAL RESEARCH

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THE PRESERVATION OF NONHUMAN PRIMATES AND  
THEIR UTILIZATION FOR BIOMEDICAL RESEARCH

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The nonhuman primates of Latin America are being used extensively in medical research. This is a recent practice which resulted from the availability of these animals in the pet trade and the search of scientists for animal models for human diseases. The successes of this search have caused some research projects to become dependent on New World monkeys for their continuation. Of particular note are research projects on hepatitis, on atherosclerosis, and on malaria.

At the present time there is a crisis in the supply of these monkeys for research. This has resulted from a number of factors. The proximate factors are the increasing concern of the Latin American countries for the conservation of their wildlife and their disapproval of the collecting and marketing techniques. The ultimate factors are the extensive cutting of neotropical forests to provide more land for agriculture and grazing and the pervasive hunting of monkeys in protein-deficient areas. Ironically, these latter factors have been exacerbated by the past successes of medical research and public health, which have contributed to the rapid rates of population increase in Latin America.

A mixed strategy would seem to provide the best solution to this complex of problems: (1) the breeding of neotropical primates in the countries using them; (2) the captive breeding of the animals in their country of origin;

and (3) the maintenance and management of nonhuman primates in the wild. The breeding of monkeys in the user countries is expensive, but it permits best control of disease problems and the development of laboratory strains of primates. However, it can probably supply only a small percentage of the animals needed in medical research. Captive breeding of primates in their native countries will be less expensive and presumably can supply a significant percentage of the animals needed. Techniques are presently available for establishing breeding farms for several species in Latin America. The third strategy - the maintenance of wild populations - is necessary insurance. Large wild populations will maintain genetic heterogeneity and will assure the continuing availability of species even if breeding programs are eliminated by epidemics or other catastrophes. Maintaining natural habitats and wild monkeys is very inexpensive compared with captive propagation. It is the only way to assure the future availability of species which can not now be established in self-sustaining captive breeding colonies. The management of wild populations will require more research and the development of new methods. However, it is the only strategy of the three which can meet the demands of medical research during the next decade and it is the only procedure which will meet the demands of the Latin American countries for the conservation of their native wildlife.