

The UNAM ecology reserves

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The National University of Mexico (UNAM) has some of the most important biology reserves in the country, not for their size, but for the quantity and quality of biological information created in them.

There are three main land reserves: Los Tuxtlas and Chamela run by the Biology Institute, and El Pedregal de San Angel, managed by a committee from the Biology Institute, the Ecology Center and the Faculty of Sciences. The Department of Urban Development and Ecology (SEDUE) recently delegated operation of its Lacandon Forest station to the UNAM.

Los Tuxtlas

Los Tuxtlas, near Catemaco, Veracruz, was created in 1968, and contains 700 hectares of high rain forest. It is one of the last forest areas remaining in an area that until recently was covered by exceptionally exuberant foliage. Few species of large mammals survive there because of its small size. The larger carnivores and herbivores have disappeared, leaving small colonies of howler monkeys, large populations of small vertebrates and a great number of invertebrates and plants.

The Los Tuxtlas rain forest is fondly called the "plastic jungle" by researchers who work there. This exaggeration refers to the many years of research projects that have left tags

on thousands of plants, and the lines and blazes marking zone boundaries remain.

The Los Tuxtlas forest is one of the best known in America. Several classic works in international literature originated there. For example, pioneer studies on tropical tree demography were started there in the nineteen seventies by Dr. José Sarukhán, present rector of the UNAM. These studies led to methods for evaluating the age of forest clearings, and resulted in important research on the dynamics of undisturbed and disturbed rain forests.

The first studies on ecological physiology of tropical tree seeds were also begun there twenty years ago. These studies, also an international

first, were made by Alfredo Gómez Pompa, Carlos Vázquez and others, and are much sought after when forest regeneration programs are planned.

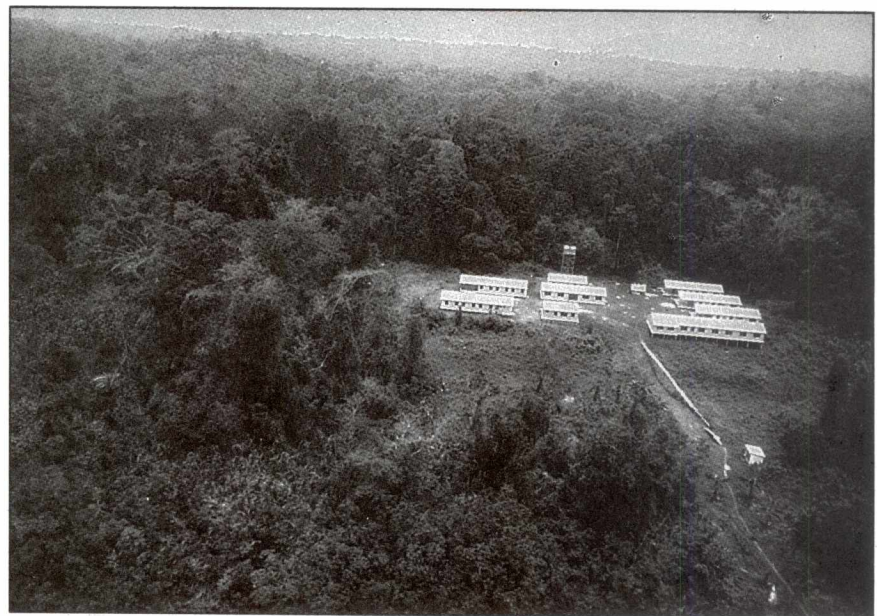
Many important tropical ecologists have been trained or have worked in the Los Tuxtlas Reserve.

Chamela

The Chamela Reserve, located on the Pacific coast in the state of Jalisco, contains 1,500 hectares of low deciduous forests. Other protected areas and little-disturbed ranches surround the reserve, permitting large mammals like jaguar to survive. The station, created in 1972, is one of the better known Mexican protected areas.

Ecosystem studies made there on how valleys function under different management systems (traditionally clear-cut and planted corn fields, different types of parcel management, forest management, etc.) are unique in Mexico. Once more, the large number of flora, fauna and population studies developed there have laid foundations for the rational use of many neighboring low forest areas on the Pacific coast.

Recent generations of biologists and tropical ecologists have been



Chajul.

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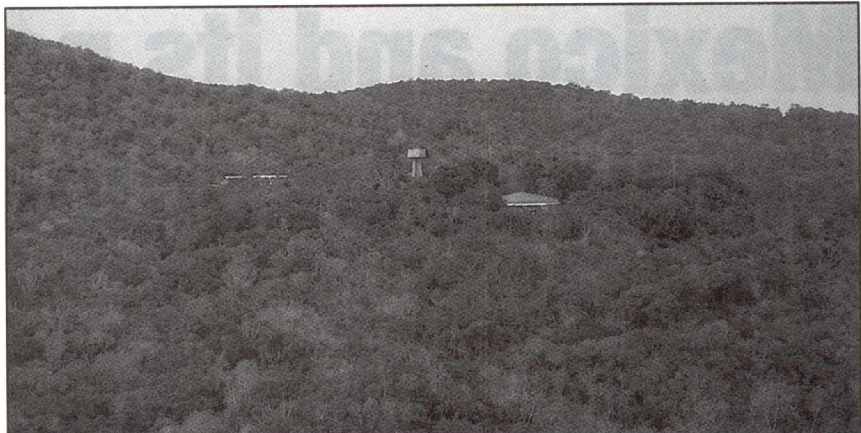
trained in Chamela, as in Los Tuxtlas, since increasing interest has been shown in southern Mexico's low forests.

El Pedregal de San Angel

This reserve is radically different from the other two in its environment, because it is located in the University City, completely surrounded by Mexico City. Created in 1983, at present it contains 140 hectares.

A little-known fact is that the overwhelmed city of Mexico, example of untold environmental woes, contains a wild area where more than 150 species of butterflies, around twenty species of mammals (squirrels, rabbits, civet cats and even foxes), more than sixty species of birds and 300 flowering plants all survive.

The Pedregal reserve is really small, but justified, because it serves to protect the last outpost of vegetation



Chamela.

in the rocky southern area of the Federal District. There is also a natural interest in this type of extremely varied and lush ecosystem, and in its role for training and educating biologists and ecologists.

Indeed, the reserve has become a natural teaching laboratory, inspiring biology and ecology theses at both

graduate and undergraduate level. On the other hand, the experience and knowledge generated in this small area became the foundation for the Ajusco mountain, middle level restoration program. The UNAM is currently working on the program with officials of the Department of the Federal District and the Tlalpan Delegation.



Tropical Biology Station Los Tuxtlas, Veracruz.

Chajul

The Chajul Biology Station is the latest acquired by the UNAM. The Center for Ecology was authorized by the SEDUE to operate this station in December 1991; it is located in the extreme southwest of the Montes Azules reserve in the Lacandon Forest.

Based on work already done in the area, development of a program for active basic and applied ecology has been planned for this station. This will lay the foundation for the rational use of rain forests and provide productive non-destructive alternatives for the region's inhabitants.

This ambitious project needs the participation of other institutions, and considerable financing. Based on results from other reserves operated by the UNAM, we expect the Station to have a beneficial influence on the area. Also anticipated is the production of high-quality scientific information and trained researchers 