

VIII.

ANIMAL KINGDOM.

In the Mexican Territory both the animal and vegetable kingdoms, are extensively represented throughout all the different regions, and from the interesting studies of the naturalists Herrera, Sánchez, Sumichrast and Duges, I have been able to form a table of the Mexican fauna in something like their due order.

MAMIFERA.

- 1st. Order: Primates, Two Species of Monkeys.
- 2nd. Order: Quiroptera, A numerous family of Bats and Vampires.
- 3rd. Order: Insectivora, Two species of Soricidæ of the genus *Blarina* Gray.
- 4th. Order: Carnivora, lion, coelot, tiger, small tiger, tamalaya, onnces or small lions, wolves, coyotes, foxes, mapaches, badgers, weazels, martens, bearded monkeys, comadreas and otters.
- 5th. Order: Syrens, Manati.
- 6th. Order: Ungulados, Tapir, jabalies and deer.
- 7th. Order: Rodents. Squirrels, rats, mice of numerous species, moles, huitztlacuatzin, quauhtusas, tepeizcuintle, rabbits and hares.
- 8th. Order: Edentados. Armadillos and honey bears.
- 9th. Order: Marsupials. Opossums and opossum rats.

The bison or buffalo range in large herds throughout the plains of the frontier states, where are also found numerous species of deer, beaver, besides black, grizzly and red bears.

Oil and sperm whales, seals and sea-lions, are found, the first on the western shores of California and the others in the Gulf of Cortés.

On the plains and slopes of the hot country, as well as on the extensive cattle ranges of the Southern States of the Republic, the business of cattle breeding has reached a high state of development, whilst between the 21° and 26° sheep breeding is found to be very successful. The horses which are of the Andalusian breed, are of medium height but well proportioned, with great powers of endurance and full of life and vigor, whilst on some estates attention is paid to the breeding of other classes. The horned cattle are ordinarily bred on large ranches, from which they are brought to the markets for sale either as beef animals or as working stock. In the State of Morelos is found a particular breed of buffalo called "Caravaos" of great strength and endurance. Throughout the republic the breeding of stock in general is largely developed, the breeding of swine being very extensive in the States of Mexico and Jalisco.

BIRDS.

The birds of the hot country in this Republic are more distinguished for the beauty of their plumage, than for their song.

The red and green Macaws, the toucans, the parrots and parroquets, the common and royal pheasants fly in flocks filling the air with their shrieks, and reflecting in the light of the sun their beautiful and many colored plumage, at the same time that in the depths of the forest the melancholy song of the turtle dove calls to its mate. In the State of Chiapas we find the beautiful royal birds of Guatemala (quetzal), with their graceful crests, and feathery tails.

Within the territory of the Republic, we have four classes

of birds of prey; eagles, falcons, hawks, and owls of all sizes, and the gallinaceous family are very numerous, such as turkeys, pheasants, chachalacas, partridges, quails, and others of the same class.

Equally numerous are the birds of the crow family, magpies, swallows, carpenter birds, cuclillos, tucans, and king-fishers, whilst among the singing birds, we can mention the zenzontli, or mocking bird, the thursh, the solitary-bird, the mulatto, the trumpet-bird, the sparrow, the calandria, the linnet, and many others. The humming-bird, a beautiful small bird, with the most lively and variagated colors, constitutes one of the most numerous and richest class as well as the principal ornament to gardens and orchards.

In the lakes of the interior, we find a prodigious number of geese, gulls, ducks and storks, amongst which are the royal stork, water-hens, sand-pipers, as well as many others, which hide themselves amongst the vegetation on the borders of the lakes, and in the swamps. These birds afford plenty of sport and make delicate eating, and amongst them we find the tildios, wheat ears, wood-cocks, and snipe. Over the waves of the ocean on both coasts, we find a abundance of pelicans, gulls of all classes, and king-fishers.

REPTILES.

The turtle is found in different species on both coasts whilst in the interior of the country, the ponds and lakes abound in the common land-tortoise. In the territorial waters of Yucatan and California, as well as of the coast of Sinaloa, turtle are found with the handsome shell that is so much used for ornamental work.

Crocodiles abound in both seas, and especially in the mouths and estuaries of rivers, on the banks of which they stretch themselves out to enjoy the heat of the sun, appearing like fallen trunks of trees to the incautious passer-by who is liable to be rudely informed of his mistake.

Alligators, iguannas, and lizards are also very numerous, as well as ophidians, amongst which are to be found boas, with a length of seven or eight meters, and many different kinds of snakes, some of them being venomous. Amongst these we may enumerate, the beetle-snake, the mazacoatl, the corral snake, and the rattlesnake, which is the most common; the rivers and irrigation ditches contain the inoffensive water-snake, and in some orchards and gardens, they even keep tame snakes, called cenacoatl, with the object of keeping the grounds free from certain classes of rodents. There are also many other kinds of snakes in the country, such as the ribbon-snake, the sabanera, the alicant, some of which are very handsome for their bright colors, with metallic reflection, such as the *leptiophis mexicanus* and the *lep diplotrapis*.

Lastly, there are found in the country different species of chameleons.

BACTRACIA.

Of this family we find various species of toads, frogs, and the Mexican proteus, called axolotl.

FISHES.

These are extremely abundant in the Mexican waters, from the fiercest, such as word-fish, sharks of different kinds, and mantarraya, down to the most inoffensive and delicate, such as the pampano, huauchinango, lebrancha, curbina, esnegrigal, red and dark pargo in the Gulf of Mexico, soles, salmon, bopet, herring, hog-fish, horse-fish, robalo, flying-fish, bonito, and many others in the Pacific. In the rivers and lakes the fish are equally abundant, the principal being, cat-fish, mojarras, trout, and sardines. The larger lakes, such as Chapala, contain a great variety of these different kinds, besides a few more peculiar to themselves.

INSECTS.

The insects are as various as they are numerous, especially in the hot country, where they are most abundant in the exuberant vegetation, with which it is mostly covered. Amongst these we find the mosquito, the horse-fly, the weevil, ants, wood-ticks, and many others which are a torment to man. This plague greatly diminishes in the temperate regions, and entirely disappears on the high table land. Amongst the insects a very important family is the cochineal (*coccus cacti*), and the bee (*apis mellifera*), on account of the excellent materials which they produce, and which are so useful to industries and commerce. The first of these is largely bred in Oaxaca, and gives a red coloring matter, which is applied very largely in the textile industry, and of the second there are found throughout the Republic, large hives which produce enormous quantities of wax and honey. Throughout the whole country the butterflies are to be seen flying in brilliant swarms, competing in beauty of form, and variety and splendor of color with the humming birds that are found in the gardens.

Amongst the innumerable number of insects which afford a rich field of study to the naturalist, are to be found the numerous order of coleoptera.

SPIDERS.

Of these there are different species found in the country, as well as of scorpions, the latter being most venomous in the hot country, and principally in the State of Durango.

CRUSTACEANS AND MOLLUSCS.

The members of these families which most abound are lobsters, crabs of different kinds, cray-fish, pearl and common oysters, of which rich beds are found on the coast of Califor-

nia, the first class extending as far South as the coast of Jalisco.

The existence of fossil moluses in noticable quantities in the interior of the country, is of great assistance to geologists in the clasification of the different strata. In his work on the Isthmus of Tehuantepec, Major Barnard, considers the existence on those coasts of the *aplisia depilans*, as certain, according to the following paragraph: "The existence of this animal, on account of its rareness, has been considered as fabulous by most naturalists; but there is no doubt that it does exist on the shores of the Pacific; there it is found in large swarms on rocky points, and the Indians employ it extensively in the manufacture of a species of twine which they call "caracol" from the local name of the animal. At low tide it is found adhering to the rocks, from which it is easily collected, and on blowing into the shell, the animal contracts itself and throws off an acrid liquor, excessively foetid, with which the Indians stain their hanks of thread, washing them afterwards with water and soap, and obtaining a permanent purple color." According to this author, this molusc, which the Indians use, is the same that was anciently called *lepas marinus*, from which the famous Tyrian purple was extracted.

The territory of the Republic affords such a vast field of study, with respect to its fauna, that it is imposible to do it justice or treat it as extensively as it deserves in a work of this class.