

Natural History.

THE CONDOR.

The condor is a native of the mountain chain of the Andes, and is one of the largest of the birds of prey. The average expanse of the condors' wings is from eight to nine feet, and the length of the body from the point of the beak to the extremity of the tail three feet and five or six inches.

The color of the condor is a grayish black; the wings are marked with white, and there is a collar of downy white feathers about the neck. The crest of the male is quite large. The internal structure of the condor presents some curious features; the "gizzard" is provided with longitudinal rows of horny spikes, which are supposed to assist the bird in the rapid digestion of its food.

These birds often attack cows, bulls and deer, and as their assaults are chiefly directed upon the eyes, they blind their victims, and they soon fall by the blows which are inflicted upon them by the beaks of the birds.

The condor is very strong, and even when wounded a powerful man is no match for one of these creatures.

The Indians have a great dislike to these birds, and if they capture one of them alive they torture it very cruelly. Their mode of capture is as follows: They kill an animal and expose the body in the open air. The condors soon assemble in large numbers and feast upon the flesh. As soon as they are gorged to the full the Indians dash in among them and capture them with their lassos. When they feel the noose around their necks they endeavor to reject the meal which they have swallowed, but are made captives before they are able to rid themselves of the food.

The flight of these birds is grand and beautiful; they seem to fly by moving the head and neck rather than the wings.

Although there have been condors in the Zoological Gardens at Dresden since 1874, it is only recently that anything has been found out in regard to the length of the brooding season, their habits at the time, their manner of feeding their young, etc.

Very little has been known of the habits of these birds until lately, as they live at a height of from 10,000 to 15,000 feet, and only come down to the lower points in search of prey. The Indians assert that the eggs are laid upon the bare rock, the bird making no nest whatever.

The condors in Dresden commenced laying in April, 1877, and, after that, laid from two to three eggs yearly in April or May, but unfortunately they crush their eggs immediately, or after playing with them several days. Last year a nest of dried branches, feathers, and wool was made in the top of the cage, about two meters from the ground, and it was thought that the birds would avail themselves of it. Loose material for nest-building was also put in the cage, but the female laid her eggs in the sand as before, and both the eggs were soon destroyed. The same thing happened this year in the middle of April. Shortly after the birds were removed into the large summer quarters of the birds of prey, and the female laid an egg on the 9th of May, in a dark corner of the cage. The next day the male commenced to brood. All the materials for a nest that the keeper laid under and about the egg were rejected and scratched away, and the brooding went on upon the gravel bottom of the cage. The male devoted himself to the brooding the greater part of the time, the indolent female only setting upon the egg about a third of the time.

On the seventh of July, after nearly eight weeks, the keeper announced that he had discovered life in the egg. The next day the bird had almost escaped from the shell, only the head and neck remaining in, and on the following day the bird was entirely freed. Since then the old birds have been very busily employed in giving the little one the necessary warmth, and have manifested equal anxiety in feeding it with horse flesh and small pieces of cat and dog flesh. The little fellow, with its grayish feathers, looks something like a little owl. Its head and neck are quite black. If any one approaches, it commences already to utter angry cries, and the old birds are so ugly that the keeper can only enter the cage armed. The brooding continued for eight weeks less one day. Cassel says, in his "Natural History," that a condor's egg was hatched in six weeks and two days by a hen. This may be on account of the nest which the hen had.

The young bird, on the first day, measured ten centimeters in length, and on the twentieth day twenty-eight centimeters. The condors are fond of bathing, and often sit upon their eggs with their wet feathers.

WASPS AND THEIR NESTS.

The common wasp is found all over the globe, and is known by its long slender body, colored yellow and black, and by its four wings, two of which are folded double over the back when in repose.

The true wasp is always social, living together in large numbers. Wasps may be divided into three classes, male, female, and neuter; only the two latter are provided with stings. One radical difference between the bees and the wasps is that the wasps do not secrete wax. They build their nests of a gray or reddish paper, formed of fibrous substances that they tear off with the powerful mandibles and fasten together with their gluey saliva. The arrangement of the cells is also slightly different. Another peculiarity is the desertion of the wasps' nest at the first frost.

The perfect females pass the winter hidden in the moss, on the ground, or in the holes in walls or trees. In the spring they awaken from their long sleep and start out to seek food. They attack the blossoms of the young fruit trees, and, later, the currant bushes. This is the best time to destroy as many wasps as possible, for each female wasp that is killed prevents the formation of a nest.

The food of wasps and the mixture they feed to their larvae is much more varied than the nourishment of the bees. Wasps are fond of all kinds of sweet things, especially honey, which they often try to steal from bee-hives. Their tongues are too short to obtain honey directly from flowers, but they attack the ripe fruit where the skin has been broken by rain or birds; they drink the sweet sap exuded by trees, and from these substances they make a tolerably sweet honey, which they store away or feed to their young. Wasps will also seize living insects, even spiders, and tear them apart to feed to the larvae. In the autumn they will even come inside the window to seize the housefly, and in the woods, one can often notice the sudden disappearance of all flies at the approach of a hornet. They will voraciously devour the meat exposed on the stalls in the market, and often cause serious loss to the careless butcher.

Wasps are much more nocturnal in their habits than bees; and it must be remembered that in the evening, when it is perfectly safe to handle a beehive, it may be dangerous to attack a wasps' nest, as the wasps may still be flying in and out.

In France, the wasps generally make their nests in holes, either in the earth or in trees and walls, and under the roofs of houses. Nests have even been found in old barrels and deserted beehives, the remnants of whose honey had probably served to nourish the intruders.

The underground nests are very brittle and easily broken, as they are made of bits of decayed wood and bark glued together. They are the color of fallen leaves. The common wasp and the "German wasp," are very similar, and generally build their nests in the abandoned holes of the field mice and moles. They dig out the earth to enlarge the nest, and spread it in little piles about to hide the entrance to the hole.

In the ordinary nest the comb is protected by a concentric covering and divided into three distinct parts: 1st. One or perhaps more combs or layers of hexagonal cells. 2nd. Pillars that join and support the different combs. 3rd. An outside covering composed of several membranes of paper, which is covered with a sort of gluey varnish that is secreted by the wasps' tongues, and gives the nest a silvery varnish. On account of this varnish and the convex form of the nest, neither the rain nor cold can penetrate into it, consequently the temperature of the nest is higher than that of the atmosphere, sometimes being fourteen or fifteen degrees warmer.

The mother wasp commences her nest in the beginning of summer, and first constructs a foundation of woody fibers, which she builds up in the form of a capsule, forming in the centre eight or ten cells, to which she adds new cells when necessary.

The first eggs are always working wasps or neuters, and the mother wasp is forced to leave the nest frequently to obtain nourishment for them. Afterward, when these are grown, they do all the work, enlarging the nest, providing food for the later larvae; and from this time the working wasps, which can easily be distinguished by their more slender bodies, are the only ones that are found flying.

From the first of August to November the mother only lays the eggs of males and perfect females.

The larvae (Fig. 1), which are white and without legs, are attached to the cells by the extremity of their abdomen, and hang head downward. There are two brilliant spots on their heads, and their mouths are stronger than those of the bee larvae, as they receive tougher food. When the larvae are fully grown they