

HUNTING BIRDS WITH A CAMERA

A Record of Twenty Years of Adventure in Obtaining
Photographs of Feathered Wild Life
in America

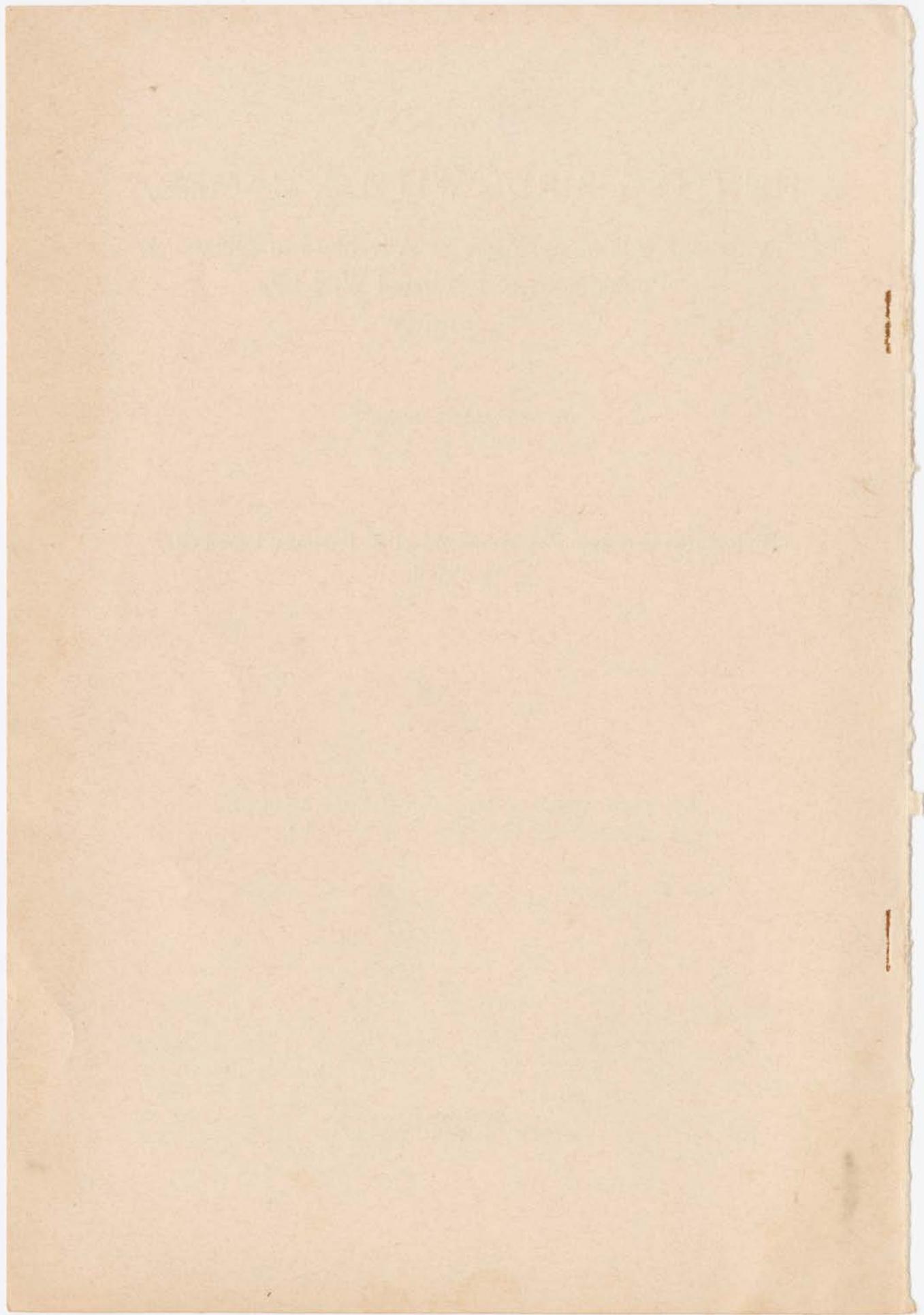
By WILLIAM L. FINLEY

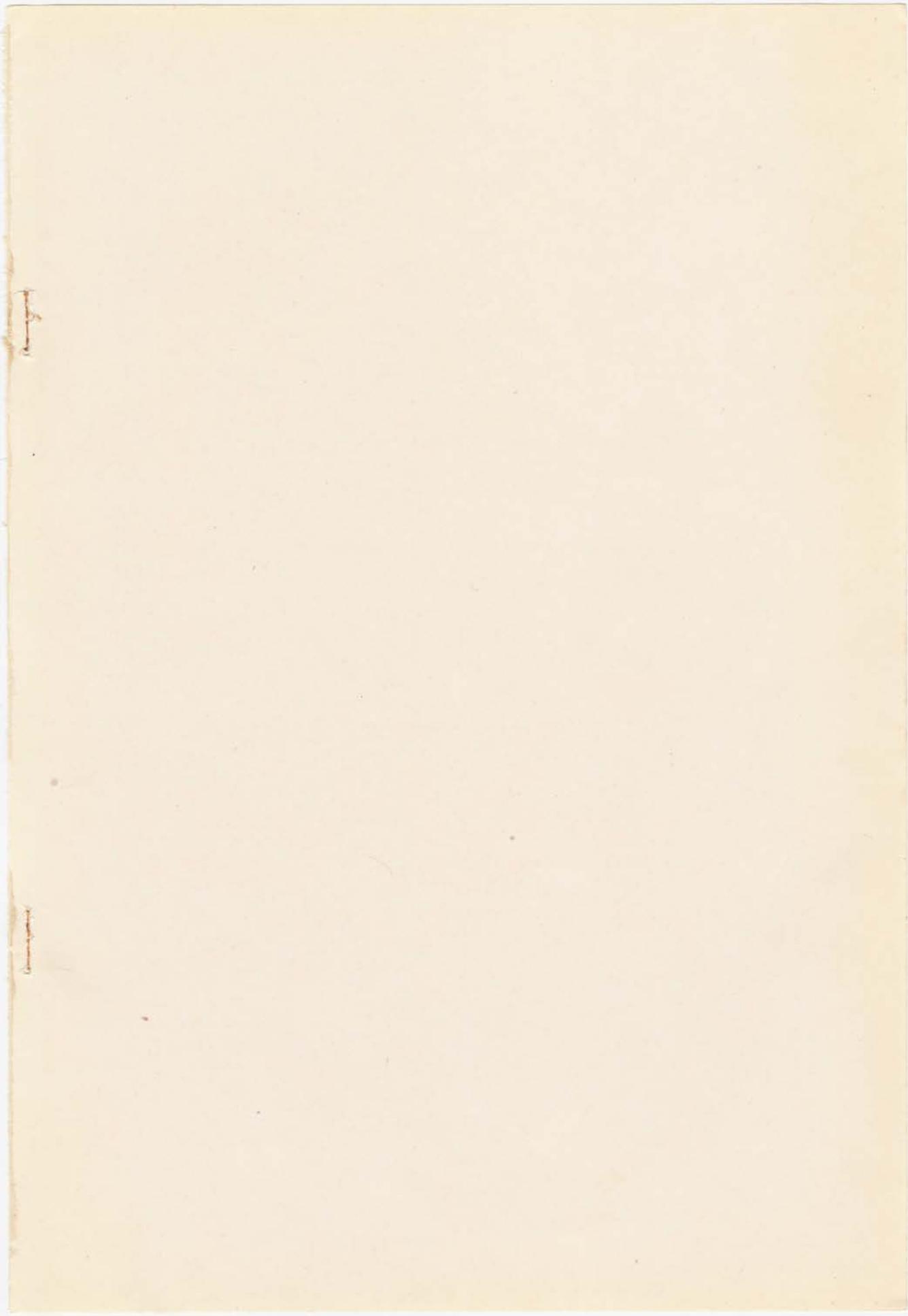
OF THE NATIONAL ASSOCIATION OF AUDUBON SOCIETIES

With Illustrations from Photographs by H. T. Bohlman, Irene Finley,
and the Author

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AS FAR back as I can remember, I can see the Black-headed Grosbeak that took his meal of elderberries in the tree just outside the east window. I recall the Goldfinches flocking in the autumn fields and I hear the evening calls of the White-crowns gathering in the rosebrier to spend the night. These were all friends of my childhood days. The lure of the wild birds developed into a hobby.

Later the opportunities opened for me to hunt out the haunts of rarer birds and make friends with them. Finally, I have made business out of pleasure by lying in wait with camera and notebook.

Behind the years of hunting lies an eagerness for the chase that has been fully satisfied in hunting and shooting with the camera. Outwitting has often come in outwaiting a shy subject. Some call it patience, but it is a lasting joy that has come with the quiet chances to study at bird homes and learn of the real character and individuality in these wild children of nature.

THE PAINTER'S ADVANTAGE OVER THE PHOTOGRAPHER

Years ago, in reading about Audubon and looking at the pictures in his big portfolios, Bohlman and I developed an ambition to show some of the things with the camera which this great naturalist had shown with the brush.

Our object was to secure a series of photographs of American birds that were both artistic in value and which showed the home life, traits, and habits of individual species. To achieve this aim, the search was made for typical nests of artistic setting, and when these were found, visits were made from time to time to get different stages of growth of

the young birds and to make a photographic life history of the species.

We soon discovered that the skilled painter has an advantage over the photographer in many ways. The art in a bird photograph is so greatly limited by the working possibilities of the camera.

The painter may place his Heron on one side of the river or the other, plant his trees just where they produce the best effect, make the water ripple or reflect, flow east or flow west.

When the camera hunter tries for these effects, he has to search high and low for foreground or background. He has to move to suit the light. Even if he selects a good position, he never knows just when his bird subjects are willing to pose. He may try for days and weeks and not succeed in getting a combination that will make a picture.

A good bird photograph is a reflected image of facts. The reality of things, the truth, is the appeal which the photograph makes. We cannot set photography over against art. A photograph has to be studied for its own sake. It may be compared with other photographs, but not with creative work of pen or brush.

In considering the photograph from an artistic standpoint, we have to take into account the relation between the camera, which is a mechanical means of expression, and the ideas expressed in the picture. Because of the difference in the means of expression, we cannot compare a picture made with a camera to a painting made with a brush.

In wild-life photography one generally has to take what he can get. Yet this is not always so. One may often obtain photographs of artistic value by combining a technical knowledge of the camera with a sympathetic study of nature. He



THE CAMERA HUNTERS CORNERING A DUCKLING IN THE MARSH

A baby Duck is quick at diving and darting, and it is hard to catch him still a moment in order to get his picture. He begins to hunt his own living the day after he is out of the egg.

may sometimes select his position and his subjects; if he has the patience to wait hours and maybe days, he can get the make-up of his picture.

This we did in the case of the Caspian Terns nesting on a tule island in Lower Klamath Lake, Oregon. We set our camera, carefully concealed in a blind, to get a small bunch of tules in the foreground and the lake in the background. With this combination for a picture we exposed plate after plate at the Terns flying past. Out of 20 exposures one was successful.

In southern California Mrs. Finley and I tried for days to get a combination picture of Gull, clouds and waves. Both Gull and waves were moving so rapidly that the highest speed was necessary. The distance between the two objects made it impossible to get both in focus at once. With the bird near enough at hand to show clearly, one had to forfeit the clearness in the balance of the picture. Whenever the waves were breaking just right, it was almost impossible to catch a Gull in the right position and *vice versa*.

THE GREAT BLUE HERON IS AN ARTISTIC POSER

Some birds make up much better in photographs than others. The attitude of the Great Blue Heron at rest is in itself artistic. While photographing in a colony of these birds in the San Francisco Bay region, we hunted for several days to select a position that would have an artistic make-up. The best we could find was the outermost branches of a tall sycamore.

The only viewpoint for the camera was from the top of an adjoining tree. At this place we had to erect a small stand and tie the camera in position. The distance was too far for the regular lens, but with the telephoto attachment a good picture was obtained after the old Heron returned from fishing and perched on a dead limb at the side of her nest (see page 173).

The first trips of any consequence that Bohlman and I took to study bird life were in 1897 and 1898. During the summers of these years we made two long canoe trips to the headwaters of the Willamette River and into the mountains. In the summer of 1899 we cruised Lewis River in Washington as far as Tum Tum

Canyon. During this trip we were capsized in one of the swifter rapids and lost the camera and part of our equipment.

STUDYING SEA BIRDS FROM ROCKY CLIFFS

Our first intensive work in making photographic studies of wild birds was one summer, when we were landed on some of the rocks off the Oregon coast by sealion hunters. At this time we had our first glimpse of the great colonies of birds that lived on the sea cliffs.

We decided to return at the first opportunity and make a careful photographic study of the sea birds. This could not be done in a day or several hurried trips, so we decided to hazard a camp on the ledges and stay until we could complete our work.

Two years later we pitched our four-by-seven tent on the beach opposite Three Arch Rocks. Although it was the latter part of June, the sea winds were cold and the rain continuous. Occasionally the sun would break from the clouds for a day and our hopes would rise as the size of the breakers diminished, but this would be followed by a sou'wester that brought a steady drizzling rain and lashed the white caps as high as ever. We were wet half the time, but did not catch cold. We soon reached a sort of amphibian state, where a condition of water soak was normal.

Three Arch Rocks are about a mile offshore. These great stacks of basalt, so named because each has a huge arch through the base, are the largest islands off the Oregon shore. They lie two and a half or three miles north of the narrow entrance to Netarts Bay and about six miles south of the entrance to Tillamook Bay.

We had but one way of reaching the rocks, and that was by means of a 14-foot dory. We tried twice to go out over the bar, but we were not able to discover a break in the oncoming line of combers. The treacherous current nearly wrecked us on the outer spit. We decided the only way to get out from the ocean beach was to land our dory in the surf at a point opposite the big rocks.

For 16 days we lay in camp while the waves throbbed incessantly. We often lay awake at night, hearing the rain beat on the canvas and listening to the wind,

trying to imagine the growl of the surf was growing fainter.

Every morning we crawled out in the gray light to see if we could detect a gap in the line of breakers. We lay in the sand by the hour with our field glasses, looking at the bird world offshore. The longer we looked, the more alluring the rocks became.

One morning, when we had grown impatient, we tried to drive our boat through the lowest place in the surf barrier. We waded in with our little dory until she floated. Watching our chance, we jumped to the oars. The nose of the boat plowed through the foam of the first and second breakers, but they tossed her like a toothpick. She shot at the third like a hunter at a fence, but failed to reach the top before it combed. Crash! came half a ton of green foaming water down my back.

We swerved a little to the right and another monster rose like magic. Several tons of the next wave piled over us, and the third tossed us shoreward empty as a cracker box. We had taken the precaution of wrapping our camera equipment in water-tight bags and tying them in the boat. We dried out the rest of the day and went at it again the following morning, with about the same success. The next day the surf dropped lower and we reached the smooth water beyond.

A BABEL OF WILD-LIFE VOICES

As we pulled near the rocks the air-laden guano smell struck our nostrils. The babel of distant sounds was broken by the scream of a near-by Gull or the roar of a sea lion. As we approached the lowlying rocks, the huge hulks of sea lions were stretched like logs thrown up by the tide. The ranks grew thinner as they receded from the water's edge, till the topmost ledges were held by three lumbering bulls. They were all alert. They dragged themselves along the shelves on their elbows as a person would whose hands and feet are tied.

The bellowing grew louder and louder, until one would have thought the fog-horns of a fleet of battleships had suddenly broken loose.

Mingled with the roaring of the bulls were the bleating of a hundred calves and the cries of thousands of sea fowl that

scurried overhead like swarms around an arc lamp in May-fly time.

We could not talk above the din. When we got nearer, many of the lions wabbled to the edge of the ledges and rolled off in the water. Those nearer the top came down the slope in a series of jumps that ended in a splash. The last old bull on the top left slowly and defiantly, like a captain reluctant to leave his sinking ship. Two mothers and a crowd of babies stayed.

Far up under the eaves of those great stacks of basalt we could see the California Murres whirling and flashing in circles. Thousands sat in long white waist-coated lines on every available shelf, as if on dress parade. Others splattered over the water and dived about our boat.

Squadrons of pug-nosed Puffins with short wings and roll-shaped bodies buzzed about the crags like bumblebees. White-winged Gulls, curious and cackling, followed our wake. Ungainly Cormorants flapped solemnly away, while others returned strung out in Indian file. Far up the sides, and penciled against the blue sky, we could see their black regiments standing at rigid attention beside their nests and eggs.

We decided to land on the south side, where the rock shelved down to tide level. A steady ground swell of 10 or 12 feet would not let the boat touch the rock. As the wave receded, we backed in and one of us landed in a flying leap, while the other pulled away to keep from being dashed against the jagged rock by the next breaker.

Provisions had to be tossed ashore. Some of our bulkier belongings barely escaped a watery grave. The hardest task was in ledging the boat. We swung her well in on the crest of a big wave, jumped, and held her as the water receded; then, with block and tackle, we worked her up to a 12-foot table away from the lash of the waves.

Looking for a camping spot on the rough side of the cliff was a good deal like hunting for a lodging on a winding staircase. There was but one spot wide enough to stretch out upon, about 40 feet up from the landing place. We awoke the next morning feeling as if we had spent the night on the top of a broken picket fence.



THE AUTHOR'S FRIENDS, A FAMILY OF DESERT SPARROWS

Little Johnnie, in the rear, was afraid his turn would never come; but he got the next mouthful. While these young birds looked alike, the mother knew one from the other, especially at meal time.



A GOOD WING SHOT OF A FEMALE PINTAIL DUCK

Shooting with a shutter is many times more difficult than shooting with a gun. The camera was hidden in a blind and the photographers waited all day before getting this picture.



A ROAD RUNNER, OR COCK OF THE DESERT

A typical bird of the cactus country of the Southwest bringing in a whip-tailed lizard to her young in a cholla cactus. Her larder contained four kinds of lizards.



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YOUNG GOLDEN EAGLES READY TO BREAK HOME TIES

There are two species of Eagles in the United States—the Golden Eagle, nearly exterminated east of the Mississippi, and the Bald Eagle, our national bird. Alaska is trying hard to reduce the number of the latter. Her bounty law has caused the slaughter of about 12,000 Eagles to date. The salmon cannery claim that the Bald Eagles catch many fish and are destructive to fur-bearing animals and reindeer fawns.



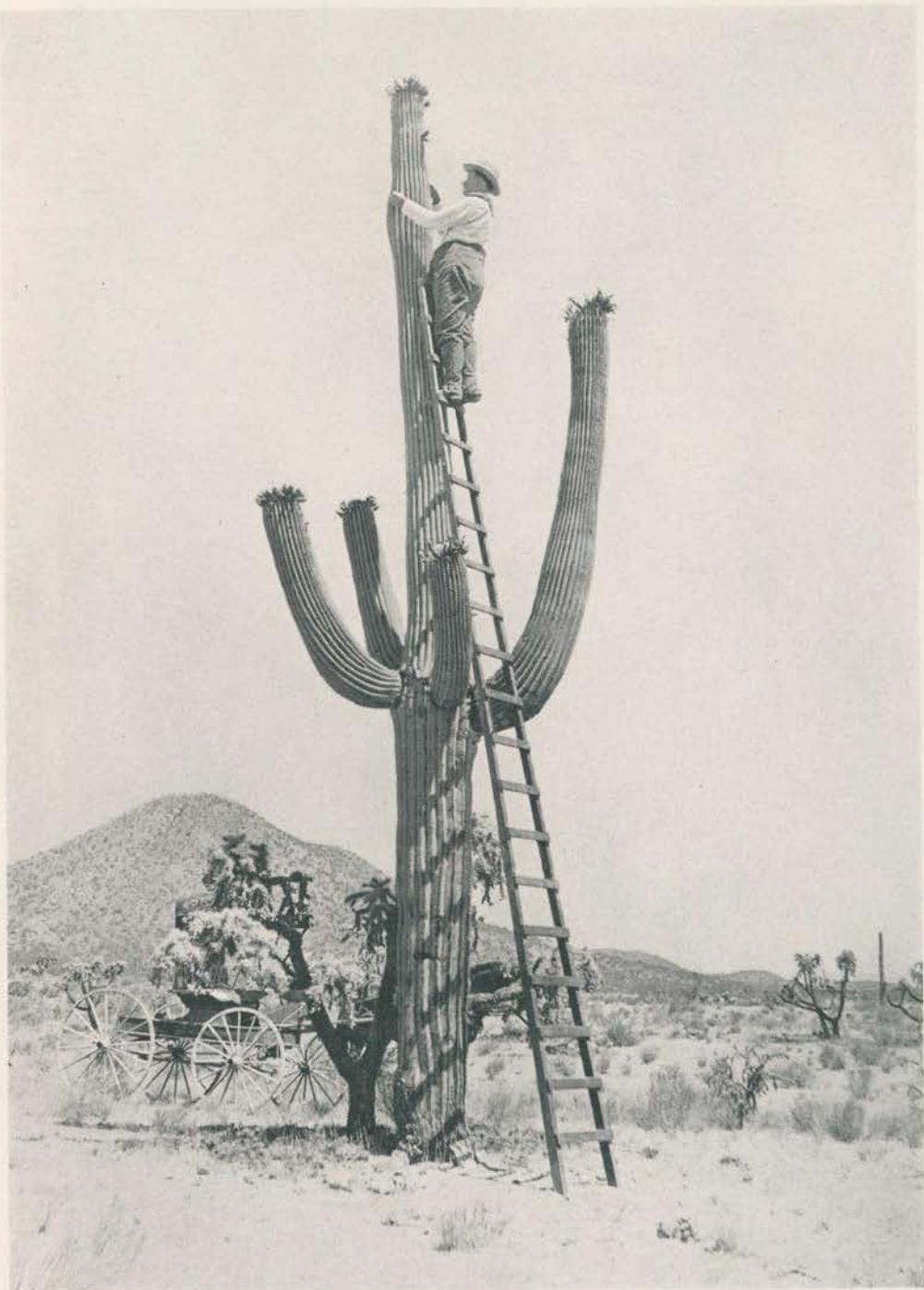
"THE BENEDICTION"

A parent bird is seen alighting in a colony of half-grown young Pelicans crowded together like children in a day nursery. As a rule, there are two young in each family.



A DANGEROUS CLIMB AFTER SEA BIRDS

California Murres live on the inaccessible ledges of the sea cliffs. Through the efforts of the National Association of Audubon Societies, these rocks off the Oregon coast were set aside as a Federal reservation for sea fowl by President Roosevelt in 1907.



VISITING THE HOME OF AN ELF OWL IN ARIZONA

The tiniest of all Owls, about the size of an English Sparrow, generally takes a deserted Woodpecker's hole in the top of a giant cactus. No one could climb such a tree, but a 25-foot ladder reached the nest-hole.



A WEDGE OF WHITE PELICANS

No ship will ever sail the skies with the grace and beauty of a White Pelican. While ungainly in appearance, a flock of these birds winding slowly among the clouds is a sublime sight. The wings, partly black in color, make a showy contrast with the white of the body.



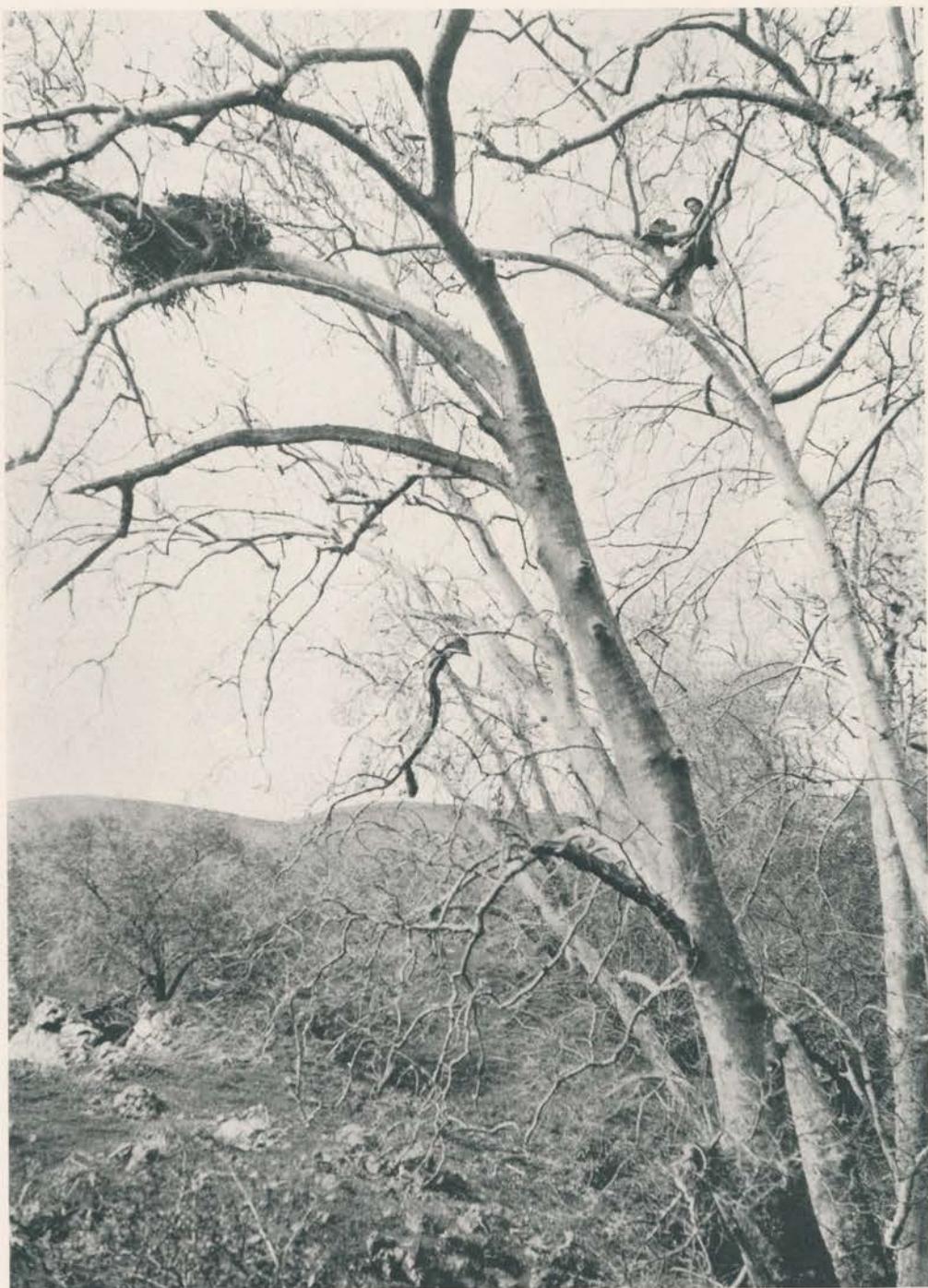
GREAT BLUE HERON ON GUARD BY HIS NEST

This bird is sometimes erroneously called "Crane." He has long legs for wading after fish and frogs, is about four feet high and, if he were subject to human ailments, would have about 12 inches of sore throat.



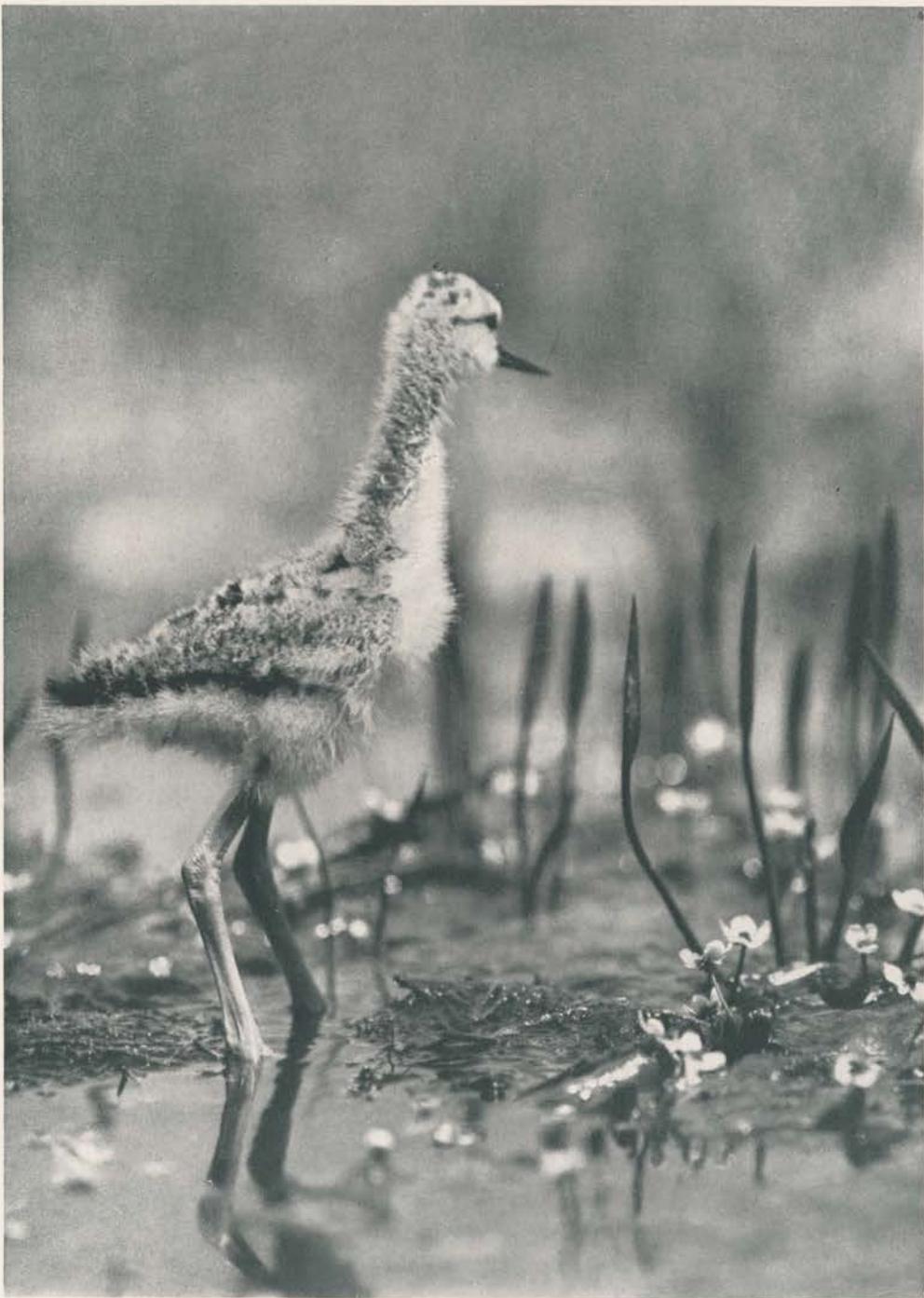
A LONG CLIMB TO A RED-TAILED HAWK'S NEST

A Red-tail likes to get the highest place for his aerie, so he can have a good outlook. This one, in the central part of California, was 80 feet from the ground in a eucalyptus tree.



PICTURING THE AERIE OF A GOLDEN EAGLE IN CENTRAL CALIFORNIA

The big birds had carried a cartload of limbs and sticks and built a platform nest, five feet across, strong enough to support a man.



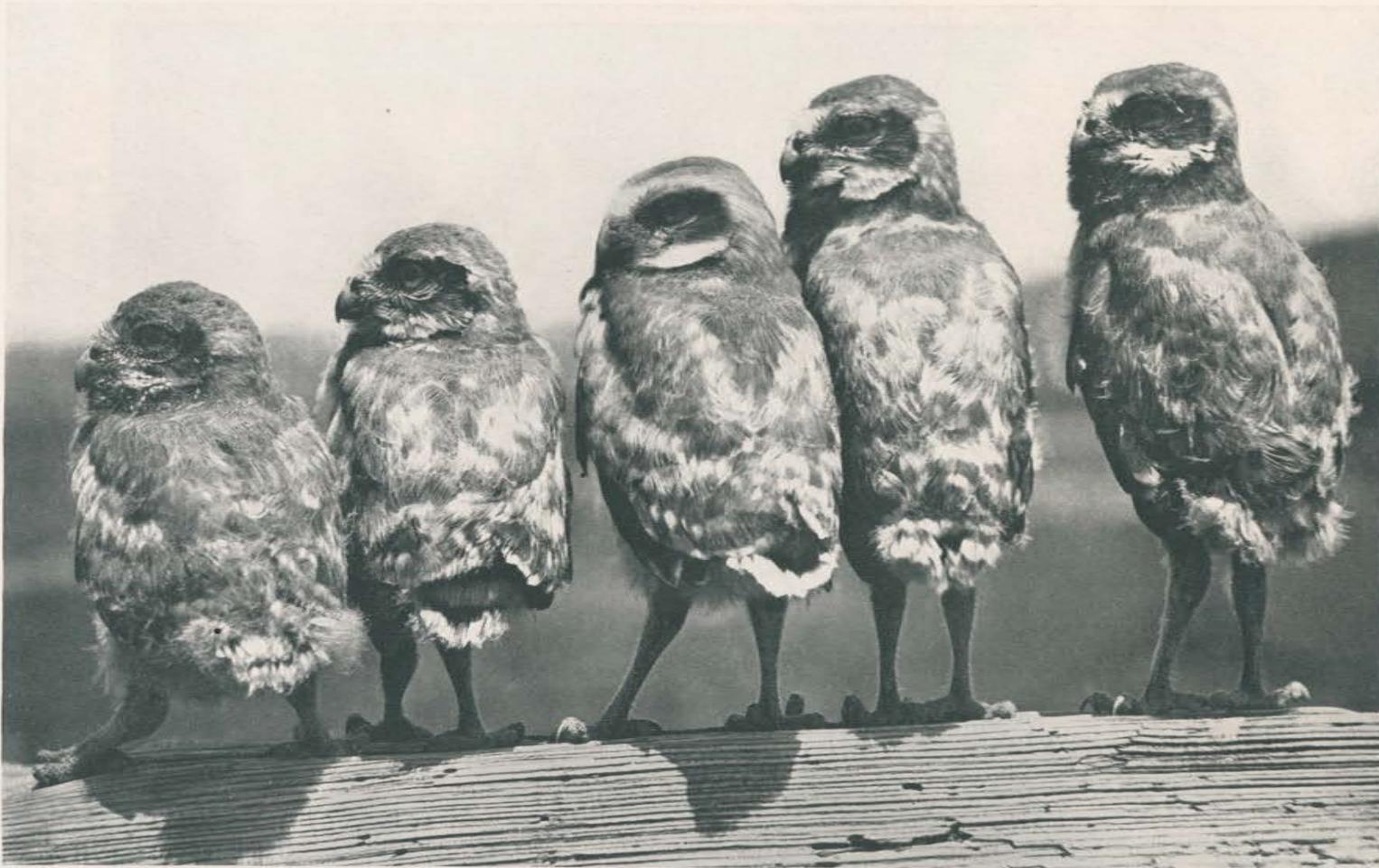
A YOUNG AVOCET AT HOME IN THE MARSH

The Avocet is a resident of the great marsh areas of the West. His skirts are cut short for wading and he moves along in the water, swinging his bill from side to side, hunting for water insects.



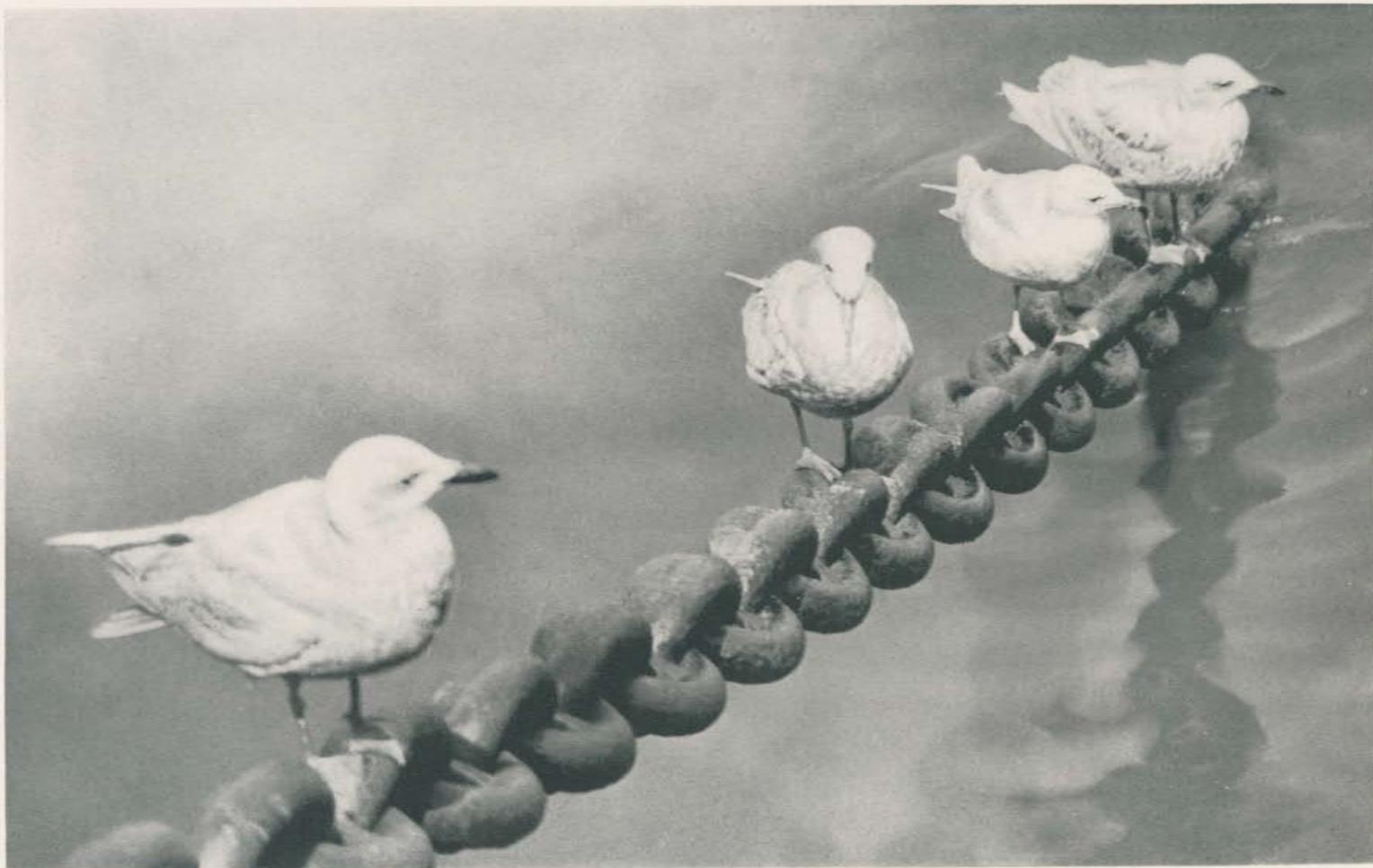
CALIFORNIA CONDOR ALIGHTING ON THE MOUNTAIN SIDE

The Condor is the largest bird that flies and also one of the rarest. He weighs from 20 to 25 pounds and has a wing spread of 9 or 10 feet. When under sail, a bird of this size always has difficulty in making a safe landing.



A FAMILY OF HALF-GROWN BURROWING OWLS

These Owls are associated with prairie dogs and ground squirrels. The nest is always several feet under ground in the deserted home of one of these animals. It was formerly reported that birds and rodents lived together in the same burrow, but this is not true.



GULLS ON AN ANCHOR CHAIN

These birds are at home along the waterfronts of our seacoast cities, where they live during the fall and winter, picking up waste scraps of food. In summer they nest in colonies on the islands of inland lakes or on the sea rocks off the coast.



A COVETED PLACE ON THE BOWSPRIT

Gulls live about a ship as a robin does in a garden. They will coast along at the stern of a steamer for days to get a meal of choice "seconds" thrown out by the cook. There seem to be reliable records of Gulls following the same vessel from the Irish coast to New York, a distance of 2,560 miles.

On the next two flats just above ours were two large "chicken yards" of Murres. The clamor of these quarreling birds lasted long into the night and began with renewed vigor at daylight.

Although everything was open in camp, the ventilation was vile. The whole island was rancid, in spite of the airing it got from every wind of heaven.

After breakfast we started out, Robinson Crusoe-like, to explore the rock. This rose in abrupt cliffs from the sea, but the south side, upon which we were camped, was well ledged.

By climbing from shelf to shelf and zigzagging back and forth, we found a way to the top. One shelf had to be scaled with a rope. At another a projecting knob enabled one to look straight over the drop for 150 feet, and around this we had to edge our way. A little above was a portion of the cliff that was crumbly and broken. Here we climbed from the nest of one Cormorant to another and clambered on up to the pinnacle of the rock, where we could get an idea of the size of the island.

GULL SCRATCHES HIS EAR WHILE ON
THE WING

One of the prettiest sights about the rock was the Gulls, which filled the air like so many feathery snowflakes. Their immaculate white bodies and soft gray wings tipped with black were delightful to see.

I liked to watch them because they were masters of the air. There was a constant adjustment of wings to meet every air current that struck the rock; but in a steady breeze the movement was too slight to see and they hung motionless, as if in a painted sky. They tacked straight in the teeth of the wind. I saw one retain perfect poise and at the same time reach forward with his foot and scratch his ear.

A Gull in his own country will steal and murder like a pirate. If a Murre or Cormorant left its home without a guard, these saintly looking scalawags swooped down to eat the eggs and young.

The Murre has a large, tough-shelled egg which the Gull's bill cannot penetrate. But these robbers know enough to pick it up, fly out, and drop it on the rock below or nose it along until it drops to the shelf below, when they can devour the contents.

Oftentimes I have seen a Gull pick up a young Murre or Cormorant not long out of the egg and swallow the youngster alive. The downward course of the young bird was marked by a bulge in the Gull's neck.

I have often seen a Western Gull act in a way that speaks well for his sagacity. I have watched him open clams and mussels at the seashore. His bill is unfitted for crushing the hard shell, but he will take a clam, rise to a height of 30 feet, and drop it to the hard sand and gravel below. If it doesn't break, he will continue the performance. I saw one bird do this 15 times before he was successful.

PETRELS BUILD ANNEXES TO PUFFINS'
NESTS

The roof of the island rock is covered from one to three feet deep with a loose coating of earth. It is fertilized with the guano of countless generations of sea fowl. From this sprouts a luxuriant growth of chickweed, clover, and other grasses.

The whole surface is so perforated with the burrows of Tufted Puffins, Beal Petrels and Gray Fork-tailed Petrels that one can scarcely walk without sinking into the nests.

The Puffins dig in from two to three feet, and a burrow will often have two or three openings.

A Petrel sometimes uses the door of a Puffin's nest as an entrance and digs himself a kind of a side bedroom off the main corridor. It is not unusual to find one or two Puffins along the main hallway and a couple of Petrels lodged in the attic.

A near front view of a Tufted Puffin is more like a modern battleship than a member of the feathered tribe. It has a huge red and yellow bill and long yellow curls. According to the Lamarckian theory, the bird has been doing nothing since creation but sit around on the rocks and bite open clams and mussels (p. 195).

PUFFIN PROVES A VICIOUS BITER

My first experience with an old Puffin prejudiced me. I wanted a Puffin's egg, so I dropped on the ground, thrust in my arm to take one, and was somewhat taken in myself. I thought at first I had run my hand into a beaver trap. I couldn't get loose until I dug the beast out and



A WHITE PELICAN LEAVING A COLONY

This species is larger than the Brown Pelican, having a wing spread of eight or nine feet and weighing 15 or 16 pounds. The bird rises with difficulty, but, once under way, sails with surprising ease and grace (see page 172).

pried her jaws open. She cut through the flesh to the bone. The odds are always against your getting an egg if there is an old sitting Puffin hen in the hole.

We might have lived on the rock for a month and climbed over it every day and not known a Petrel was there, if we had not found their hiding places. They are nocturnal in their nesting habits and are never seen about the rocks in the daytime. By digging in the soft earth, it was not difficult to unearth Petrels and their nests. One of the parents stayed in the burrow.

The Petrel nestling is fed during the day by one of the parents thrusting its

beak down the mouth of the young bird and injecting a yellowish fluid. The old birds become expert at this. If you take one out of its burrow, he will immediately "play Jonah" in your direction with surprising power of projection. A dose of rancid fish oil shot up your sleeve is not pleasing!

One evening we made the dangerous trip to the top of the rock and hid on the north slope. At the last gleam of daylight the Petrels, returning from the open sea, swept in upon the island like a swarm of bats. Those in the burrows came chittering out to meet them.

The ground beneath seemed full of squeakings and the air with soft twitterings and whistlings. We felt the breath of swift wings, but not a bird could be seen, not even a shadow. Here were acres of nesting holes hidden down in the tall grass and in the darkness of the night; yet each bird had some

inexplicable way of finding his own front door in this hidden city.

The novelty of our situation had a great deal to do with relieving the hardships and dangers we had to undergo in living for five days among the sea birds on the vertical side of the rock island.

We had two 10-gallon casks of fresh water. We could have lived here as long as the water lasted, for it was easy enough to catch fish and we had an unlimited number of eggs. We had various kinds of omelet, according to the species of birds on the island. Fresh Murre eggs were excellent for cooking purposes, and Cormorant eggs, hard boiled for luncheon,



THE PELICAN YAWN

The Pelican has an elastic bag or pouch that hangs from the lower part of the bill. This is used as a dip net. The bird swims along, up-ends, and dives for a fish. It was formerly thought that this pouch served to convey live fish, swimming in water, to the little Pelicans at home; but it would be impossible for a Pelican to fly with his burden so out of trim.



A YOUNG PELICAN GETTING HIS DINNER

A mother Pelican regurgitates a fishy soup and the baby helps himself out of this family dish. When he is half grown, the mother opens her mouth, and his whole head and neck disappear while he hunts for his dinner in the internal regions.



A FEAT IN TREE-TOP PHOTOGRAPHY

At the aerie of a Golden Eagle when the nestlings were nearly grown. One camera man had to climb over the nest to the end of the limb beyond. This photograph was not taken by a third person, but a second camera was tied in the top of the adjoining tree and the shutter released by a long thread.

are better than chicken eggs. The white of the egg is not white at all but a transparent blue of gelatin consistency and is very edible.

NO POETRY IN A SEA-BIRD RETREAT

There is not much poetry on the island. A nature lover who might fall into ecstasies over a song bird in the woods would receive a severe jolt the minute he came near an ear-splitting Murre colony or got the faintest whiff of the atmosphere.

We could not climb along the ledges an hour without risking our lives in a dozen places. While camped on the rock, we wore rubber-soled shoes, so we could hang or cling to the surface with some degree of safety. Even with these, we often found our toenails instinctively trying to drive through the soles of our shoes to get a better hold.

Up and down the ridge of the rock was a large colony of Brandt Cormorants, birds commonly called Shags. Their nests were scattered a few feet apart for over 100 yards. The nests were built up in funeral-pyre fashion by the débris of past generations, grass and seaweeds, fish bones, and the disgorged remains of banquets. In every nest were four or five eggs of skim-milk bluish tint, over which it looked as if an amateur whitewasher had smeared a chalky surface.

When I first looked at a motley crowd of half-grown Cormorants, I thought Nature had surely done her best to make something ugly and ridiculous. They stand around with their mouths open and pant like dogs after the chase on a hot day. Their throats are limp and flabby and shake at every breath. Their bodies are propped up by a pair of legs with a spread of toes as large as a medium-sized pancake.

The youngsters have no very clear notion of what feet are for, at least on land. If you go near, they go hobbling off like boys in a sack race.

It is not uncommon for young birds to fall over the ledges of the cliffs, where the population is so crowded. Late one afternoon, while preparing our usual meal at our camp, which was partly protected from above by the overhanging rock, we were startled by an avalanche of loose gravel. We jumped for cover as a half-grown Cormorant came flopping down

and landed with a thud in a heap at our feet. He came from one of the nests about 75 feet above.

Such a fall would have broken every bone in the body of an ordinary creature. The newcomer got up a little dazed, twisted his neck in a few grotesque curves, as if just waking up; then he climbed over our pots and pans to the end of a board which served as our dining table, crept up close to our fire, drew in his long neck, and went sound asleep.

The California Murre is by far the commonest bird on the rocks. It crowds together in immense colonies. The bird lays a single egg in the open, with no sign of a nest, not even a bit of grass or a stick to keep it from rolling. Its peculiar shape helps to keep it in place, even on the bare, sloping rock, and if it is accidentally started down grade by the movement of a bird, it does not roll straight, but swings around like a top on its own axis and comes to a standstill a little lower down.

EACH BIRD KNOWS HER OWN EGG

My first impression as I looked at the colony of Murres crowded together on the shelf of rock was that the nesting must be communal. All about lay eggs so close together that one could hardly step without crushing them. Thousands of eggs, and yet no two alike! The combined effect was that of a whole spring flower garden of tints. Some were of a pure white ground color, others had various washes of gray or brown, and still others showed a dozen shades of blue.

Upon this ground was spread, in most instances, an elaborate pattern of splotches of all sizes and shapes, sometimes thicker on the large end and sometimes on the small end—splotches of brown, gray, and velvety black. Often they were marked all over. Some were daubed as with a brush; others scratched from end to end, as with a pen, and finished off with wild flourishes and scrawls. How, among so many, could any bird recognize her own?

How, in the vast throng of individuals, did she even find her own mate? To my dull human sight they all looked alike. I was unable to pick out a single bird that I could recognize if I turned away and looked back a moment later. And as



TWO YOUNG ROAD RUNNERS AT LUNCH

When a young Road Runner eats a lizard, he has a meal 10 or 12 inches long. He sits like a man with a board up his back and eats by inches, the lizard disappearing at the rate of about an inch every two minutes.

I watched them coming and going, it seemed to me at first as if each female was satisfied to plant herself on the first egg she found and, like any barnyard fowl, did not care a fig whether she or her neighbor had laid it.

But I soon became aware that such was not really the case. From my vantage ground I could see every movement in the ordinary run of life in the big colony without in any way disturbing the birds.

In order to discover whether or not it was within a Murre's limited intelligence to know her own egg, I experimented several times by scaring the birds from their nests and watching their return. Almost before I was hidden, the first Murre pitched awkwardly in. She sat for a few moments clucking and craning her neck, then hobbled up the rock past two eggs, bowing and looking about. She stumbled on as clumsily as a boy in a sack race, stopping and cocking her head from side to side like a nearsighted old lady, until she had passed eight or nine eggs. Finally she poked one gently with her bill, looked it over, and tucked it under her thigh.

By this time the ledge was full of Murres, all cackling, pecking one another, and shuffling about in search for the one and only egg.

EVERY CHICK TO ITS OWN PARENT

Two years later I tried a similar experiment on the same colony when all the eggs were hatched. It had been noisy during the days of incubation, but it was bedlam when the Murres had young. As soon as the parents were scared from the nest, the infants began to squeal, and kept it up until the parents came back. When the first mother bird returned she bowed elaborately and uttered a series of calls varying in tone from the deep bass of a man's voice to the cackling of an old hen. After standing there for a few moments she straddled a few feet closer and began once more to bow and call.

Some of the young waddled down to meet their parents, squealing like a litter of pigs that had just been gunny-sacked. One crawled hurriedly down to get under an old Murre's wing, but she gave him a jab that knocked him backward and sent



A PET ROAD RUNNER SWALLOWING A LIZARD

A lizard is always eaten head first and when he once starts down a young Road Runner's throat, his scales prevent him from backing out. The head is digested first and in a short time the tail disappears with a final gulp (see text, page 201).

him looking for his real mother. She looked at two more that sat screaming, but passed them by and knocked another sprawling out of her way. At last a chick came up that seemed to qualify, for she let him crawl under her wing. Moreover, the same thing seemed to be going on in every part of the ledge, and I did not see any of the old birds accept a chick until after calling and looking around for several minutes.

The result of these experiments seems to prove that scientist right who, some years ago, claimed that nature has not lavished pigment on the Murre's egg without purpose, but that the wide variation in size, shape, and color undoubtedly helps the Murre to recognize her own. After the eggs are hatched, the difference in pitch, volume, and quality of the voices may tell the mother which chick belongs to her.

It is most interesting to watch the arrival of a Murre mate as he comes from the fishing ground to relieve the brooding mother. Sweeping in on swift wings, he begins to slacken speed when about 20

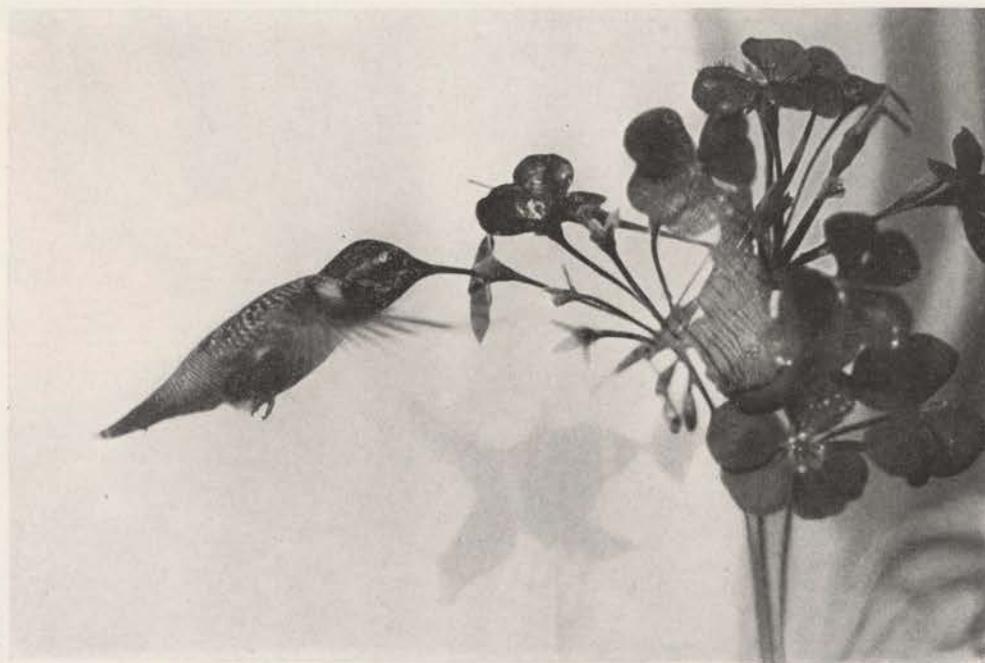
feet from the ledge, drops his legs, and back-paddles as awkwardly as a man who slips on a banana peel; and he lands sprawled out on the rock much as the man lands on the sidewalk.

Then, like a person anxious to penetrate a Fourth of July crowd, he looks for an opening in the dense front ranks. Seeing none, he boldly sets out to make one by squeezing in and shoving from right to left. The neighbors resent such behavior by pecking him, but he presses on, amid opposition and complaint, until he reaches his mate.

They change places and he begins his vigil on the egg. His mate, instead of taking flight from where she stands, usually goes through the same proceeding in reverse order until she reaches the outer edge of the rock and makes a quick launch seaward.

SEEKING THE HAUNTS OF THE WILD GEESE

When a boy I had watched the wedges of Geese cutting southward each autumn and the other flocks of wild fowl winging silently on their way. Each spring I



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A RUFOUS HUMMING BIRD TAKING LUNCH ON THE FLY.

He dropped into the garden like a shooting star. By our filling the flower cups with sweetened water, he was lured to the geranium and "shot" by the camera man.

saw the bands returning. How these sights kindled my imagination, these processions, so full of mystery, that moved up and down the highway of the clouds!

The land where these flocks lived lured me like "castles in Spain." It was a lure I have never forgotten.

One spring we followed the trails across the southern tip of the Cascade Range from Ashland, Oregon. The morning of the fourth day we came down the eastern slope to the edge of a ridge that overlooked the basin of the Lower Klamath.

Stretching to the east and south, almost beyond the limit of vision, lay the marshes. The Klamath River threaded its way in and out of the green maze. Beyond were the Lower Klamath and Tule or Rhett Lakes, cutting at the lower end into the lava beds of northern California. To the northeast lay the great basin of the Upper Klamath.

Here lay the land of my dreams. After nearly 20 years of waiting, I was looking out over this place of mystery that lay far beyond the northern rim of my home hills.

From the distance where I stood the marsh was a level sea of green. As I discovered afterward, it was absolutely deceptive as to its real character. The ocean surface tells nothing of its thousand hidden wonders; so the marsh. The plain yields to the plow, the forest to the ax, but the unmeasured stretch of these tules is the same as when Lewis and Clark blazed a trail into the Oregon forest.

I hope the marsh will defy civilization to the end. The trapper and the hunter have plied the streams and the water of the lake itself, but the tules lie untouched, a maze forbidding, almost impenetrable.

The lure of the tule marsh was in its wildness. It is the ancestral nesting ground of many species of wild fowl.

We camped at the edge of the marsh that night, and early the next morning bailed out an old trapper's boat and paddled slowly down the right bank of the tule-lined river.

There were many sounds. The Red-winged and Yellow-headed Blackbirds fluttered in and out and swung on the bending tops of the tall cane. A male



A MEXICAN GROUND DOVE DEFENDING HER HOME

While a Dove is a shy and gentle bird, here is a case where the mother raised her wings and slapped the intruding finger whenever it came near her home.

Yellow-head lit on the tules just a few feet ahead. He began like the peeping of a young Duck, but, as his tail spread and his throat swelled, his song grew more violent, till it ended with a contortion like the complaint of an old sitting hen when she is disturbed. Some one has given this human interpretation to the song, which should be drawled out slowly: "Pop! goes the weasel."

As I edged silently along close to the reeds, I came to a turtle lying asleep on a water-soaked log. He didn't see me till I touched him on the back; then he awoke with a start and slid into the water. Once or twice I saw a snake glide away among the tules.

All the time I had been coming nearer to a place where a Bittern was pumping. He was a ventriloquist, for when I thought he was 20 feet away, I still sneaked 50 feet nearer. "Punk-a-lunk! Punk-a-lunk!" he said, but this pumping was only the end of the call. The beginning was a "blub, blub," like water bubbling down into a big empty cask.

As I pulled myself along by the over-

hanging tules, suddenly I was face to face with the Bittern, and up he flapped with a frightened "quork."

At the next bend in the river I waded out through two feet of water to a small grassy island in the midst of the swamp. I was sure I would find Ducks' nests in a place like this, but a Duck's nest is not easy to find.

I had been wandering around for some little time, wondering why I could not find a nest, when suddenly a female Mallard flushed from between my feet. I had straddled a nest of 10 eggs before the mother flapped off lamely through the grass. I was surprised at the boldness with which she froze to the nest. It is a common trait. Twice during the morning I planted my feet within a few inches of a brooding Duck before she left her home.

Ducks are loath to reveal the location of their nests, but after the eggs are once discovered they become wilder, generally flying as one approaches within 15 or 20 feet.

The next day we started out again down the river. In the afternoon a bank



THE PORTRAIT OF A GREAT BLUE HERON
FROM BELOW

The eyes of a Heron are in the lower sloping side of his head. He can stand as still as an old stick in the water and yet, without the side turn of his head, see a minnow that swims past his toes.

of clouds began to rise in the east, and we heard the distant peal of thunder. We hurriedly started back, but the wind was soon lashing the waves into whitecaps. Before long the advance drops began to strike us.

It was impossible in the midst of the marsh to haul the boat out and crawl under. The nearest cover was our small tent, two miles away; so we wrapped the cameras in our coats and put our strength to the oars.

We were suddenly enveloped in a shaft

of green light as the sun broke through a rift in the clouds. There were green shades in the water, backed by the darkening of the pouring rain. Then over the wide stretch of the marsh the birds began to rise — white-winged Gulls, Red-head and Teal Ducks, all winging up and away to their nests and young.

Gaunt Cormorants lifted from the surface and beat along over the water, leaving a trail of little splashes in their wake. Terns began to cry and flit up from all sides, and here and there along the sedgy water's edge, a Bittern or a Night Heron rose with a frightened "Quork! Quork!" and was away with the gale. Blackbirds were all a-flutter, as the rain and hail began to pelt.

The whole surface was a-splatter with the flood of the clouds pounding the river below. Ahead and back and all about hung a misty spray from the clashing waters.

SLEEPING AMONG WATER FOWL

After spending two weeks along Klamath River, we set out overland for Klamath Falls, and then went to the town of Merrill, 20 miles south. Here we secured a staunch rowboat, loaded in our supply of provisions, and started down Lost River for Tule or Rhett Lake.

That night we camped at the mouth of the river, a great rendezvous for water fowl. Avocets were swooping past with a loud "Whit-whit-ie! Whit-whit-ie!" Stilts were crying "Quit! Quit!" loud and fast, and Killdeers running and flapping about in great distress. They kept crying long after we had crawled into our blankets and well into the night. The next morning we discovered the reason, for we found four nests of the Killdeer and five of the Stilts and Avocets near by.

Toward evening the Ducks came in from the lake in bands and settled down for the night where the reedy bogs lay scattered about and the water was shallow. At dusk we lay in camp and listened to the rush of wings, as the night-comers flocked in to their resting places. We could catch the faintest whir at first, which increased to a loud swish as the band passed. Out on the water came the light flappings, as flock after flock settled for the night.

After five days we set out across Tule Lake, and after rowing several hours came to the peninsula at the southeast end. This, as well as the other region to the south, is of volcanic origin. The shore is rough and precipitous. In some places the cliffs start abruptly from the water's edge; in others disintegration has been rapid, the rocks shaling off and rolling down until there is a long, steep slope of crumbly débris in which it seems impossible for anything to grow. Yet in places these slopes are massed with California poppies.

That night we camped just below the crater of an extinct volcano and early the next morning paddled out to a rocky island containing a colony of Farallone Cormorants. In a space of 25 or 50 feet we counted 190 nests, containing about 300 young birds and half as many eggs.

Rowing past Rattlesnake Island, we came to Bloody Point, a butte of red lava almost entirely covered with poppies.

In the afternoon we made camp across from another large colony where Cormorants and White Pelicans were nesting. The Cormorant nests were built of sticks. The Pelicans merely made depressions in the sand for their eggs. In addition to bird residents, the island was well stocked with fleas.

CAMPING IN THE MARSHES OF AN ALKALI LAKE

When we returned to Merrill we loaded our boat into a wagon and hauled it to White Lake, a long body of alkali water that empties into the Lower Klamath at the southeast end.

The Lower Klamath is very different from the south end of Tule Lake. The whole border is an impenetrable jungle. Tules grow from 10 to 12 feet high. One can never get to a point where he can look out above the tops and see where he is going. The foundation is made of decayed vegetation and is treacherous to tread upon. In places the roots form quite a substantial raft. One may walk across the wavy surface, but any moment he is liable to sink in over his head.

Extending for several miles out from the main shore was a seemingly endless area of floating tule islands, between which flowed a network of channels. The



A SEASCAPE ON THE CALIFORNIA COAST

A Gull is a master of the air. He can float on poised wings and at the same time reach forward with his foot and scratch his ear (see text, page 181).



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"GRANNY" BARN OWL

The eyes of the Owl are not in the side of the head, like those of the Sparrow, but in front, like the eyes of a man. An Owl has extraordinary organs of sight, for he can adjust them to see during the day or in the dark of the night.

tules had grown up for several generations. The heavy growth of each year shoots up through the dead stalks of the preceding season. On the top of this the Pelicans, Gulls, Cormorants, and Terns had perched and trodden down the tules. These precarious footholds were our only camping spots during the two weeks we cruised the Lower Klamath.

These days were full of hardship. The water of the lake contained so much sediment and alkali that it had to be boiled,

while the only fuel we had was the little we carried in the boat.

The first morning out, we tried wetting down the tules and making a small fire on top. Before we could get anything cooked, the whole foundation was ablaze and coffee-pot and frying-pan had to be used to check the flames. After that we always sought a place where the tules could be cleared away and a fire made on the water-soaked roots even with the surface of the water.



"TWO'S COMPANY"

For ages the Owl was regarded by superstitious people as an ill-omened bird of prey. You may judge for yourself whether they are spooky or just spoony. These Barn Owls are the night police about the farm to keep mice and gophers in check.

The thick growth of tules made an excellent mattress. By spreading sleeping-bags on top of a high bunch and rolling in carefully, we generally had a good bed for the night. In the early part of the evening we were two or three feet above the surface, but by morning we had sunk down just about to water level.

The largest bird colonies of this region are located on the west side of the lake. In one place, for half a mile, the Western Grebes, White Pelicans, Farallone Cormorants, Great Blue Herons, California and Ring-billed Gulls, and Caspian Terns had combined, as it were, to form one of the most extensive bird colonies we had ever seen.

To the east of the Klamath lakes are other large alkaline bodies of water where water fowl abound—Summer, Abert, Goose, Warners, Harney, and Malheur lakes. In the spring of 1908 we started into the Malheur country, which is historic ground for a bird man. In the early seventies the well-known ornithologist, Captain Charles Bendire, was stationed at Camp Harney, on the southern slope of the Blue Mountains. He saw the wonderful sights of the nesting multitudes on Malheur and gave the first accurate count of the bird life in that region.

On the south side of the lake, at the site of the historical old Sod House, a large spring rises at the base of the grav-



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THE CONDOR SMILE

The California Condor is a bird of slow growth; it takes more than six months to develop from egghood to full flight. This bird lived in the New York Zoological Park until 11 years old.

elly hill and winds out through the meadow land. For a mile it meanders along till it comes to the main part of the tule marsh—thousands of floating islands, between which flow narrow channels that are endless in their windings.

The main body of the lake is still a mile beyond the place where the spring branch enters the tule jungle. The tules grow 12 feet high; so that when one enters the mass he has no landmarks unless, perchance, he can read signs in the heavens.

We launched our flatboat in the spring

branch and set out, anxious to get the lay of the land and see some of the birds. We passed from the spring branch into the serpentine meanderings among the tules.

LOST AMONG TULE ISLANDS

In one place I heard a pair of Sora Rails chattering anxiously. We shoved the nose of the boat into the tule mass that covered the water like an immense haystack. As I crawled out over the bow and stepped on the springy mass, the

footing seemed safe, for I did not sink in above my shoes. One needed a pair of snow-shoes to walk on the surface.

By throwing myself forward and gathering under me an armful of buoyant tules, I made my way for 20 feet, with the excited pair of Rails leading me on. Suddenly I struck a weak place in the tule floor and I dropped into the muck beyond my middle. With the aid of an oar that was thrown to me, I struggled back to the boat.

We were now in danger of losing our way. A little farther on I left my handkerchief on top of a bunch of tules for a signpost. Still farther I stuck up a pole to mark our way back.

"We'll pick these up on our return," I said.

We swung around a tule island, working back in the direction from which we had come.

"I am beginning to lose my bearings," said my companion. I had already lost mine.

My first trip to Boston, that took me underground, overground, and up and down crooked streets, was as clear as wandering down a country lane in comparison to the embarrassment I felt when I tried to find my way in the narrow, walled-in, Venetian streets that circled these islands like a maze for about 10 miles east and west.

"The thing to do is to go back over the same track we came," I ventured. So we immediately turned about and spent the rest of the afternoon in trying to do it; but we never saw the handkerchief or the pole again.



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THE TUFTED PUFFIN, OR SEA PARROT

He has developed a powerful bill in feeding on shellfish. His face looks like the prow of a battleship. If you get too close, he will take your finger as quickly as he takes a fish (see text, page 181).

We had no food, nothing to drink but alkali water, and were wet, with no chance of getting dry; we *had* to find our way out. The sun was setting, so we knew east from west. We paddled as nearly as possible in the direction in which we had come. When at last we reached the end of a blind channel, where the tules seemed firmer, we decided to cut for shore by the shortest route. We floundered through the tules, sinking in the black muck of the marsh for some distance, and were suddenly confronted by a deep slough.

"Even the old tub of a boat looks better than this," said my companion.



MAKING FRIENDS WITH YOUNG BURROWING OWLS

These are most valuable birds in the farming districts of the West, because they catch great numbers of field mice, squirrels, and other small ground animals that do damage to crops. These three birds were taken out of a burrow and were soon on friendly terms.

We turned back again.

As the clumsy craft floated out into the channel and I sat straddling the bow, dangling my feet in the water to get rid of the mud, it seemed as if Nature had surely done her best to make the tule swamp unfit for man. The Rails ran lightly through the jungle, the Blue Herons stood fishing in the marginal water, the Red-wings and Tule Wrens clung to the swaying stems, the muskrats paddled homeward with tails waving contentedly to and fro; they all had places to sleep.

Darkness settled over the marsh. The stars glittered, the wind whispered in the tule tops, the birds were asleep.

It was almost noon the next day when by chance we struck the channel that led us out of the maze and back to camp. But we had learned the art of blazing a trail that we could follow through the tules, and after resting a day from our initial efforts we outfitted for a week's trip and set out down the spring branch. This time we kept a straight course to the north until we reached the main body of the lake.

Along the southeast side of the lake we discovered great colonies where White Pelicans, California and Ring-billed Gulls, Caspian Terns, and Great Blue Herons were nesting. Over on the north side were immense colonies of Western Grebes, Eared Grebes, Black-crowned Night Herons, and White-faced Glossy Ibis.

We were hunting mainly for colonies of American Egrets, or White Herons, which were formerly common on the lake. After a month's search we saw two flying over. They had been practically exterminated by plume-hunters.

Our expeditions into the Klamath and Malheur Lake countries were taken at the suggestion of Mr. William Dutcher, President of the National Association of Audubon Societies, partly with the idea of putting an end to the slaughter of wild birds in those sections, which were being killed to furnish plumes for the millinery markets. Upon our report of conditions, President Roosevelt issued a special proclamation on August 8, 1908, setting aside Lower Klamath Lake as a special reservation for the protection of

wild birds. A second proclamation was issued August 18, 1908, establishing Malheur Lake Reservation.

These two reservations are among the most important ever established, because of their wide marsh areas and the numbers of birds protected. Previous to this, October 14, 1907, President Roosevelt had created Three Arch Rocks Reservation, which was the first land set aside on the Pacific Coast solely for the protection of wild birds.

HUNTING THE CALIFORNIA CONDOR

From a scientific standpoint, our photographic life history of the California Condor has been the rarest and most important work we have done. This was accomplished in 1906. After a long search, we found the home of the Condor in one of the mountain ranges of southern California.

The advance of civilization has all but led to the extinction of the species. If one were to start on a hunt for the California Condor, he might search for years, as we did, without success. In the whole world's collections, there are not a half dozen of these birds alive. In the various museums of the world one can find almost twice as many eggs of the Great Auk, a bird now extinct, as of this Condor. A few left in the wild state live almost entirely in the Coast mountains of southern California and a part of Lower California.

The report that the California Condor is rapidly following the Great Auk, the Labrador Duck, and other species, and that it will soon become extinct, is not



"A BIRD IN THE HAND"

A friendly Desert Sparrow at Tucson, Arizona. Birds are trustful if we are kind to them. They are wild because they have been persecuted so long.

without foundation. Its range is more restricted than that of any other bird of prey. In the early part of the last century it was reported fairly common as far north as the Columbia River region.

The main cause for the decrease in Condor numbers seems to be that when stock-raising became common in California, years ago, in order to secure pasture during the dry months, the rangers were compelled to drive their herds back into the more remote mountainous parts. Here they invaded the retreats of panthers, grizzlies, and coyotes. These preyed upon calves and sheep. The quickest and best device for getting rid



A PET CALIFORNIA CONDOR

He was fond of playing in the sand by the river and stunning himself. He liked company and followed the camera man around like a household pet.

of these animals was by baiting the carcasses with poison. Since Condors came to feed on carcasses, many of these birds were killed in this way.

CONDORS RAISE ONLY ONE BIRD A YEAR

The Turkey Vulture has held its own in the struggle for existence against these forces, but the Condor is slow in recuperating its numbers. Even under favorable conditions, each pair of Condors will raise only one young bird a year. There is no existing authentic record of a California Condor laying more than a single egg at a sitting. One collector states that in a certain locality where a pair of these birds live, they have nested but three times in 12 years.

Under these conditions, it is not surprising that Condor numbers have decreased, and unless careful protection is given, the bird will soon follow the Great Auk.

The Condor egg which we found on March 10 was hatched on March 22.

During the months of April, May, June, and July we made frequent pilgrimages

back over the rough mountain trails to this rocky shrine in order to study the home life of these birds and to watch the growth of the young Condor. On July 5, when the young Condor was about three and a half months old, he weighed 15 pounds. In order to complete our studies, we took the nestling to our Oregon home. It was not until the middle of August that he was well fledged, except that his breast was still covered with gray down. With his wings extended, he measured almost nine feet.

The slow growth of the Condor is shown by the fact that from the time the single egg is laid it takes a full six months or more for the parents to raise their offspring. In the case of a Sparrow or Robin, the time required for rearing a family is less than one month.

On September 28 the young Condor was sent to the New York Zoölogical Park, where he was well cared for and lived to the age of 11 years (see p. 194).

The Condor of the Andes has long been considered the largest bird that flies. It averages about 10 feet from tip to tip,

when the wings are spread, and weighs from 20 to 25 pounds. The California Condor will average the same.

The South American Condor is glossy black, with a broad white bar across each wing, and has a ruff of white down about the neck. The head is unfeathered and is covered with wrinkled red skin. The forehead has a cartilaginous comb or caruncle, and the throat is wattled like that of a common Turkey.

The California Condor is blackish in color, with the feathers of the back edged with brown. There is no caruncle on the head, but about the neck are loose black lancelinear feathers. The lining of the wings is white, and when the bird is soaring this mark distinguishes it from the Turkey Buzzard.

The size and strength of the Condor have often been exaggerated. There have been many absurd stories about these birds killing sheep and other animals. Dr. Alexander Taylor, who gave the best early account of the Condor, said that it had been known to kill and carry off a hare in its claws.

The habit of the Vulture is to wait till after death, and it is extremely doubtful that one of these birds would ever attack a living animal.

THE BIGGEST BIRD THAT FLIES WAS "AS GENTLE AS A KITTEN"

As to the Condor's carrying its prey, this is easily discredited by a study of its foot. The claws are blunt and weak, and



A DOWNY YOUNG TURKEY VULTURE

He has the reputation of being a lost soul in the bird world. He is a bird of prey, but, with a foot like a Chicken, he cannot clutch and hunt like a Hawk or Eagle. He does not hunt living things; he plays a waiting game.

the foot is not adapted for grasping or carrying like that of an ordinary bird of prey.

In our study of the Condors at home, the most surprising thing to us was that this biggest of all birds, which has often been reported as wary and ferocious, was as gentle as a kitten. From such information as I had gathered about the California Condor, I should never have believed that we could get so close to this pair of big birds in the wild state. After our many visits, they had evidently got acquainted with us and knew that we would not harm them.



THE DINNER CALL IN THE RED-WINGED BLACKBIRD HOME

His black body and scarlet shoulder patches cause the Red-wing to be easily recognized about ponds and marshes of all parts of our country. He likes to tie his home in the reeds a foot or so above the water.

Both parents were very solicitous for the young bird in the cave. Several times, as we sat at the entrance very quietly, one of the parents, perhaps the mother, edged up within three feet.

The most surprising thing in all my bird experience was when the mother reached over and nibbled the sleeve of the camera man. Both old birds were near by. Occasionally they would caress each other.

To test the parents further, the camera man reached down into the cave, and

when the young Condor began to hiss, the mother edged down and nipped the camera man gently on the gloved hand.

He loosed the glove slightly and she began tugging at it. He let the glove slip from his hand, and for a moment it hung in her bill; then she laid it at her feet.

HUNTING BIRDS IN THE ARIZONA DESERT

At first sight one might not select the desert as a retreat for a bird-lover. A friend who had lived in Arizona told us

there were no birds in the desert. She had been there two months and had scarcely seen a bird, she said. But perhaps she did not have an eye single to bird study. When one travels 2,000 miles to hunt birds with a camera, he is likely to find them, even in the desert.

One spring Mrs. Finley and I went to Arizona to study and photograph the birds of the desert. At Tucson we bought a horse and light buggy. For three months we wandered about day after day, through the cactus and along the old river bottoms, making friends with the birds.

The problems of the desert are intensely interesting to a naturalist. Take it from nearly every standpoint, Mother Nature is strict and harsh with all her children of the desert. Life is spent on the march or in the firing line. Nearly everything is fortified with thorns.

The cactus has a panoply of points to protect its soft, spongy meat; the mesquite, the paloverde, and the delicate white poppy clothe themselves in thorns.

The pudgy toad in our Oregon garden grows fat and lazy, but he wouldn't last long in Arizona. Out on the desert, Nature arms her "toads" and lizards in thorns and scales. The "toad" grows flat and thin, can run like a streak, and digs a hiding place in the sand. He wears a crown of thorns and is really a lizard instead of a toad.

Out in the desert we found birds in abundance: Road Runners, Verdins, Gnatcatchers, and three kinds of Thrashers—Palmer, Bendire, and Crissal. The river bottoms were always full of song, for there were numbers of Mocking Birds, Chats, Cardinals, Tanagers, Warblers, Towhees, Flycatchers, House Finches, and four varieties of Doves—Mourning, Inca, Mexican Ground, and White-winged.

THE AUTOMOBILE DEFEATS THE ROAD RUNNER

The Road Runner is, perhaps, the most striking character of the cactus belt. He has a variety of names—Ground Cuckoo, Mexican Paisano, Snake-killer, Chaparral Cock, and Cock-of-the-Desert.

When we first went to Arizona we were anxious to find a Road Runner. We found several old nests and occasionally we would catch a glimpse of a slim, long-tailed bird running through the cactus.

One day, when we least expected it, a Road Runner slid across the road, hopped up into a cholla cactus, and was instantly lost to sight in the thorny mass. We drove around the bush slowly, once, twice; closer and closer till we could see through the tangle. But no Road Runner! She had disappeared, and yet she could hardly have escaped without our seeing her. A slight movement in the cactus—there she was, sitting bolt upright, holding a lizard in her bill. Until she moved, she was as completely hidden as if she had not been there.

I have occasionally seen an old Road Runner that takes a delight in outdistancing a team of horses, but the bird is not accustomed to our modern method of traveling.

One day a friend was spinning down the Oracle Road in his automobile, when at the turn a Road Runner dropped into line ahead and set the pace down the smooth stretch. The driver turned on a little more gasoline. The bird looked over his tail at the horseless carriage. It was gaining on him.

As the machine bore down on the astonished bird, he became scared. He cocked his tail suddenly to put on the brake, made a sharp turn to the left, dodged into the cactus and creosote bush, and away he went, at top speed, as far as he could be seen.

While some people accuse the Road Runner of killing other birds, especially young Quail, our experience showed that he lived almost entirely on lizards. The young birds in the nest were fed on lizards from the time they were out of the egg. The reptile was always killed and thrust head down into the mouth of the youngster. The tail hung out of his mouth for a time, but as the head was digested the young bird gulped a little now and then, until finally the end of the tail disappeared (see pages 167, 186, and 187).

