The MIGRATION of BIRDS

by A.W. Douglas

NEW facts in natural history are so interesting as the annual migration of birds, and largely because there is such little real understanding as to the nature and methods of this remarkable phenomenon. Theories are plentiful, but a demonstrable explanation of all the facts involved is still wanting. Some of the inherent characteristics of migration, such as the apparent sense of direction possessed by birds, seem to defy observation and analysis, and to be absolutely beyond our ken so far as any understanding goes. The cause itself of this curious habit so far is only conjectural, but the most logical explanation seems to be a search for food. This apparently holds good for the fall flight from North to South, when insects have perished from the cold, and vegetation died, so that both insectivorous and grain-eating birds are alike affected. Yet some members of both species, crows, jays, quail, partridges, wood ducks, chrdinal grosbeaks (the ordinary red bird) and often some red-headed woodpeckers, remain North throughout the winter and manage somehow to make a living and perpetuate their species.

Even if these be exceptions to the general rule, there still remains the unanswered question, Why do not those birds who winter in the South remain there throughout the year instead of going North when the spring opens? Food is abundant and apparently southern latitudes are as fitting for the rearing of young as the far North. As a matter of fact, we really do not know, though we have some interesting and plausible theories about it that do not bear the test of questioning. So as usual when we run across some mystery in animal life that we cannot unravel, we call it "instinct," and let it go at that. Of this one thing we may, however, be quite sure, that instinct in animals always serves some useful purpose, and is usually an expression of nature's care for the preservation of the species.

Years of observation have developed the interesting fact that there are certain well-defined routes in all countries which the migrations follow, certain water courses, certain chains of mountains, certain valleys, and this seems to obtain from one generation of birds to another. Whether the younger birds learn this from the older birds who have been before, or whether they simply mechanically follow the older birds in their flights is largely conjecture, but two facts seem well established. First, that animals evidently have some method of communicating with each other. Everyone who has heard Bob White call together the scattered covey, or the hen give the alarm for a hawk to her chickens, is convinced on this point. The second fact seems, however, to controvert the theory of the older teaching the younger ones the way they should go, for it has been shown in many instances that flocks composed entirely of the year's broods of young birds make their first migratory flight alone and unattended by the older birds, and find their way unerringly along the usual routes of migration. Once more we have to fall back upon instinct.

Just how birds find their way from one distant latitude to another is the most inexplicable of all the many mysterious facts of migration. The length of the flight from northern habitat to southern winter resort varies according to the different species of birds all the way from 1,000 to 3,000 miles, and in a few cases to 5,000 miles. Yet these distances are apparently traversed in generally direct straight lines, and with the most orderly and businesslike methods of procedure. To say that the older birds show the younger birds the way (since this has been shown to be untrue in many cases) only removes the difficulty back into the remote past, for at some time there had to be some birds to find the way the first time, and we only dodge this difficulty when we talk of inherited instinct.

It is clearly not a case of birds seeing their way and being guided by landmarks. It is known that migrations as a rule take place at night, and that in general birds fly very high, in fact, at tremendous heights, when migrating. Under such conditions finding their way by sight is impossible. Moreover, the sight theory breaks down in the case of those birds who cross great stretches of water where there are no landmarks whatever. There is a species of cuckoo which summers in New Zealand and winters in eastern Australia, which means a straight flight of some 1,200 miles without rest or stop across the trackless waters. Certain species of humming birds that winter in Central and South America spend their summer vacation in the United States, and to do so must fly across some 1,000 miles of the Gulf of Mexico.

A recent experiment demonstrated that neither the theory or seeing the way nor previous knowledge of the route can account for the finding of the way in migration. Fifteen terns were taken from their nesting places on Bird Key, Tortugas (one of the islands of the Florida reef) and were released at distances varying from 20 to 850 miles from their home, and 13 of the 15 found their way back safely. Observations have also shown that the same birds return to the same spot year after year. Robins that winter in Florida will build their nests in the same tree in a northern state as long as they live. An explantation which is in much favor is the probable possession of a sixth sense—the sense of direction—concerning whose physical basis and nature we are entirely in the dark. It seems to be a sense common to most animals. It is extremely well developed in horses and dogs, and likewise in fishes, who year after year come back to the same stream to spawn. It is possessed to a lesser degree by man, being more pronounced in the savage than in the civilized man, probably because in the latter disuse has dulled its perception.

The speed at which birds fly during migration probably varies according to the natural capacity of the species. Nevertheless, in such flights they display a speed and endurance entirely out of their ordinary wont. A little sandpiper, which summers in northern Siberia near the Arctic, has to fly over the Himalaya mountains in order to reach India, where it passes the winter. In doing this it must rise to heights of four miles and upwards to clear the towering ranges. Wilson's petrel is known to range from the South Antarctic ocean to the northern limits of British America. As ducks and geese are almost the only birds whose migrations have been seen in the daytime, many telescopic observations and instantaneous photographs have been taken of them during flight. These observations indicate that the flight of ducks, particularly teal, must frequently reach a speed of 100 miles an hour and over. Even with the slower flying birds it is possible to cover long stretches in one night, as the flight seems to be pursued without rest "all throught the night." The probable choice of night for flight is that the day may be devoted to feeding. Besides, the dangers of the birds of prey, other than owls, are thus avoided. The ducks that reach this latitude in the spring are frequently very thin and poor, evidently owing to the strenuousness of their voyage.

One of the remarkable characteristics of migration is the regularity of its annual movement among the different species, often the same day each fall and spring marking the departure and arrival. The flights seem invariably to be in flocks, whether the species be gregarious or otherwise. No sooner is the destination reached than the nongregarious species separate either singly or in pairs. One exception to this are robins, which are nongregarious in the North, but invariably go in flocks in the South. Just why some birds of the same species stop in one latitude while others go farther on is not known, though probably the question of food supply is the determining factor. The whole subject of migration is one of the interesting phenomena in nature which has been a matter of common observation for some thousand years and yet of whose essential nature we have only the scantest information.

The Bird Or the Cat?

"The Bird or the Cat?" has become a scratching subject which is making the feathers fly in many a heretofore peaceful neighborhood. Bird lovers who have attempted to establish sanctuaries for their feathered friends have been compelled to revise their visiting lists according to where her royal highness, Tabbykins, holds sway.

The bird man who has found to his sorrow that any bird and cat combination means cat-astrophe, even while he is taking the mangled body of the little feathered tenant, that he has worked for months to attract, from the clutches of the innocent-looking, fluffy, four-footed murderer, will be assailed by the cat-owner, who indignantly declares that while other low-bred creatures may catch birds, she knows her own blue-blooded darling Fluffykins is too well bred and too well fed to do such a deed!

Naturalists statistically rank the felis domesticus as third in the bird-destroying agents, holding every roaming cat responsible for the lives of at least fifty birds a year. A game warden who reports 200 quail killed by a mother cat in less than a year on the game preserve advocates the wholesale extermination of cats under the supervision of a game warden.

The value of the cat to catch mice or rats is disputed by a bird enthusiast, who maintains that this Nero of the animal world will hush forever the joyous song of any little feathered chorister simply for his own amusement when not in need of food. When he dines he goes after a cold bird in preference to any other delicacy, and will catch mice or rats only as a last resort to keep from starving.

The most serious arraignment against both the domestic and stray cat is made by the boards of health, who have found these animals to be carriers of scarlet fever, diphtheria and other diseases most fatal to their human associates.

A successful business man says that if a cat kills a little chicken in the yard of the average farmer, the cat is made away with. If the four-footed hunter comes home with a quail, he is petted; yet the quail is of greater economic value to the farmer than is either the cat or the chicken. He thinks, for humane reasons, the wild or stray cat left on abandoned farms should be put out of the way.

A cat-a-comb, where feline prowlers may be laid permanently to rest, is considered a necessary adjunct to every bird sanctuary by a bird conservationist, who has tried, without success, various methods to prevent cats from killing helpless song and insectivorous birds so valuable to man. Another long sufferer from cat depredations considers a near-by deeper bath, in which to immerse and leave the savage depredators, is the only way in which a bird bath may be maintained.

Some friends of the birds think to license the cat and hold the owner responsible for his pet's destructiveness will solve not only the vexing cat, but also the kitten, question. They conclude that if a person pays for a license he will not be so apt to desert his cat, leaving it dependent upon hunting for a living.

Optimists who still believe that cat nature may be educated or restrained, suggest that bells and bright ribbon be placed on pussy so that a warning will precede her fatal spring. Others advocate that the poles or trees on which bird houses are placed should be sheathed in tin or wrapped in barb wire to prevent the cat from climbing up and destroying the half-grown nestlings before they can fly to safety. A thorny rose bush is advised by another humane person; but the ever-present cynic thinks it much better to plant the cat at the roots of the rose bush, where he is sure in time to evolve into harmless fertilizer.

MYSTERIOUS JAGS.

"Boffels says he makes it a rule never to take a drink before six o'clock in the evening."

"Ahem!"

"Well?"

"I frequently see him full during the day and I was just wondering if he had hit upon some way to take his liquor hypodermically."

PUZZLED.

"I never can tell what you men are talking about," said the debutante, with a pout.

"What's the matter now, Celestine?"

"I met Mr. Brokerly just now, and he said he'd been up to his neck in wheat all morning, yet I never saw him look more immaculate."

IN THE EUGENIC HOUSEHOLD.

"These eggs are exactly as I like them, Hortense."

"Yes, Archimedes, I submerged them in water at 212 degrees Fahrenheit for exactly two and one-half minutes."

TOO BULKY.

Stout Wife—How do you like my masquerade costume? I'm a page.

Husband—Page? You look more like a volume.—Princeton Tiger.

HIGHBROWS.

She—Didn't you think the people at Mrs. Gander's reception were all extremely dull?

"Yes, but you know it was author's day."—Life.

NATURAL DEDUCTION.

"I wonder how those spirit messages are written?" remarked the dense party.

"With a medium pencil, I imagine," replied the wise guy.

NOT THE RIGHT KIND.

"I don't see how you can stand these howling students with their class yells for everything."

"Well, you see, they're such a cheery sort."

IN THE LIMELIGHT

STRONG MAN OF GREECE

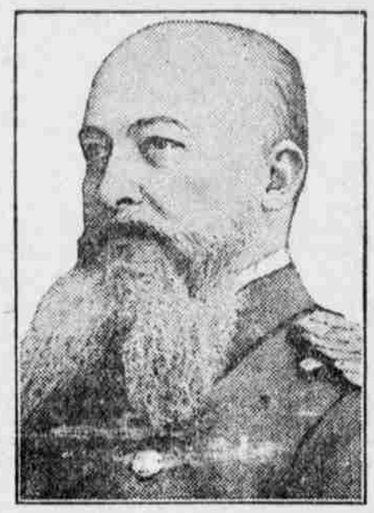
Greece's advance toward a realization of her national aspirations received a momentary check in the retirement of the powerful Premier Venizelos, whose program of entering the war on the side of the allies was frowned upon by that other hero of present-day Greece, King Constantine. Few believe, however, that the differences between the two men who are to the new Greece what King Victor Emmanuel II and Cavour were to Italy, will be of very long standing.

The world recognizes in Venizelos the strong man of Greece who in incredibly few years has accomplished so much in rehabilitating the prestige of his country.

By means of his new constitution, adopted after the revolution at Athens in 1910, Venizelos was able to effect the far-reaching reforms in putting down political corruption, and creating territorially a new Greece. He brought Crete, Macedonia, Epiros, and the islands under the Greek flag, and besides almost doubling the size of his country he reorganized the political, naval, and military administration from its foundations.

To the fact that Venizelos is a Cretan is due in part the zeal with which he has labored for the reunion of the Greek peoples scattered through the Levant, and particularly those under the dominion of Turkey. He was born in a village of Crete in 1864 of a family of very moderate means, but long traditions. He saw his own house burned to the ground by the Turks, and the vigorous youth, of whom it is recorded that he was a troublesome pupil in frequent conflict with his fellows, had much occasion later to strengthen his determination that Crete was to be free.

TIRPITZ THE ETERNAL



When historians come to analyze the great European war and begin to find out its real causes, say in about fifty years from now, it would not surprise some of the closest students of these remarkable times if they were to discover and put down as one of the greatest causes Alfred von Tirpitz, admiral of the German navy, the creator of the German navy, and one of the creators of the German foreign and domestic policy.

"Tirpitz the Eternal" is his name in Germany. It is "Tirpitz the Eternal" because while the kaiser has appointed and discharged chancellor after chancellor, and army and navy officer after army and navy officer, Von Tirpitz has gone on forever.

For seventeen years he has been at the head of the German navy and for seventeen years he has been unflaggingly at work making it the extraordinarily efficient left arm of Germany that it is. His career began at the age of sixteen. Today he is sixty-six years old, active, vigorous, determined as ever. To anyone who would suggest that he is approaching the close of his active life he has only to point out what his navy and especially his submarines have done and are doing under his command.

In appearance Admiral von Tirpitz scarcely suggests the man that his policy has shown him to be. He is more than six feet in height. He is stout and bald. His flowing whiskers parted in the middle are his most characteristic mark. His manner is extremely mild, though determined, and is somewhat more academic and professional than bureaucratic.

MICHIGAN'S PIED PIPER

Michigan has found its Pied Piper in the person of Representative Harvey A. Penney of Saginaw, serving his first term in the legislature, who comes forward with a bill designed to drive all the rats from the precincts of the Wolverine state.

Representative Penney, after having made an exhaustive study of the rat, has failed to discover just what the rat's mission in the world is, but he has found that the rat breeds in filth and is dangerous to the public health, being a disease carrier just as are the fly and the mosquito. Besides this, Mr. Penney points to the harm the rat does to everybody and everything with which he comes in contact. The rat robs the granary as well as the grain in the field, and starts fires—well, everyone knows the innumerable sins of which the rat is guilty. Government reports show that the rat caused $30,000,000 in damage in the United States last year. The newspapers all over Michigan rallied to the Penney bill, all being a unit in declaring there is not a single reason that can be advanced why the pest should be allowed to exist, that is, all except the township clerks who will be compelled to take the toll of the dead.

CHICAGO'S COWBOY MAYOR

It seems quite fitting that William Hale Thompson should rule over Chicago, the city where the largest stock yards in the world are located, for he has been a cowboy and ranch owner and has complete knowledge of the cattle business.

His career as a cowboy started in 1884, when he was fifteen years old. He went to Cheyenne, Wyo., to spend a vacation from school, and from that time the lure of the plains called him from Chicago every summer. He rode the ranges of the Standard Cattle company in Wyoming, Colorado and Montana.

Later he purchased a ranch of his own in Holt county, Nebraska, and managed it until the death of his father, in 1901, forced his return to Chicago.

Mr. Thompson is an enthusiastic yachtsman, and the problem of making the lake front the property of the people and the playground of the city will be one of the important matters he will be called to settle. There will be the recreation pier, the improvement of the land along the lake front, and the establishment of municipal bathing beaches to be considered.