CONSERVATION

Wildlife of North America Discussed at Annual Meeting

Yellowstone Elk, Restoration of Ducks and Deer, Game Enemies, Among Topics at Baltimore Conference

YOU AND YOU, Mr. and Mrs. U. S. Citizen, are part owners of a herd of nearly 10,000 elk, that live in the northern part of Yellowstone National Park. Your hired men, the rangers, count them for you once a year, working on skis and snowshoes, often battling blizzards.

At the Third Annual North American Wildlife Conference, Victor H. Cahalane of the U. S. National Park Service told of the 1937 elk census. Fifteen groups of rangers, working in twos and threes, as nearly as possible at the same time, counted all the elk they could find. Severe weather interfered, but it is felt that the total count of 8,318 does not represent much duplication. However, because of the probability that many were missed, hiding in small bands in thickets, the count was estimated as only 90 per cent complete. The full estimated total comes to 9,673 head of elk.

There is also a southern herd on the other side of the Park and in nearby territory, that is about the same size as the northern herd, or perhaps even larger.

In National Forests

By no means all the elk are concentrated in and near Yellowstone National Park. The U. S. National Forests have a tremendous big-game population. Seventeen of these forests, studied by R. M. DeNio of the U. S. Forest Service, supported a grand total of 109,037 deer and 37,545 elk, according to the 1937 game census.

Examination of the stomach contents of elk shot at various times shows that in December they make an abrupt change in their feeding habits, from grasses to the twigs of shrubs and conifers. In April they go back to feeding on grasses. Deer in general do not depend so heavily on grasses as do elk.

Deer in the forested areas around the Great Lakes are probably as abundant now as they ever will be, Harry E. Adams of the U. S. Forest Service told the conference. Years ago, before the virgin forests were swept away by lumbermen, there weren't really very many deer in them. Deer feed mainly on leaves and buds of underbrush, and in the "closed" primeval forest there is little of this.

Then came the wave of steel and fire that cleared away the forests. After it underbrush sprang up thickly in the deforested areas. With this abundant source of food the deer multiplied accordingly.

Now the new forests are improving, beginning to reach maturity, and as they do so the old, looser organization of "pre-climax" vegetations, that had plenty of room for underbrush, gives way gradually to closed stands of trees with all their leaves and buds far up beyond the reach of deer. So the antlered population is bound to diminish.

High Hunting Pressure

This maximum deer population has grown up along with a great increase in human population in the region, and hence with a hundred-fold increase in the hunting pressure on the game. Yet the percentage of success among hunters has remained about the same, said Mr. Adams, about one hunter in every three has continued to get his deer.

North and South have met in the deer population of the Pisgah National Game Preserve in the mountains of western North Carolina, and melting-pot effects are already evident among them. E. A. Schilling of the U. S. Forest Service related the history of the movement.

Before the region was purchased and set aside in 1916 the original deer population had been nearly or altogether wiped out. The former owner, George Vanderbilt, transplanted deer from other parts of the East, notably from Florida and the Adirondack mountains of New York. They were distinct varieties of the same species; the Florida deer were rangy, the New York animals solid and chunky. There were also marked color differences. The deer of the Pisgah now are a thorough-going mixture, intermediate in build and showing several color varieties.

The transplanted and hybridized population is highly successful in its occupation of the country. The census taken in 1916 indicated about 1,000; seventeen years later the count was not much short of 10,000.

Fencerows lined with bushes, small trees, even weeds, were praised as genuine assets to the land by Frank C. Edminster of the U. S. Soil Conservation Service.

Dislike of brushy fencerows started with the belief that they harbored crop pests; as indeed they sometimes do, Mr. Edminster admitted. But even when they do not, they are now considered evidence of bad farming. It has become "fashionable" farming to demand "clean fields."

Profit in Fencerows

Yet those same brushy fencerows offer several very substantial advantages, the speaker pointed out. They aid in holding the soil along field-margins against erosion and gully formation, they shelter birds that aid farmers by eating insects and weed seeds, and they can produce incidental volunteer crops of their own, like berries and fence-posts. Most important of all, they offer shelter to game birds and animals that offer enjoyment, sport, and supplementary food supplies to the landowner.

Drought years such as the West and Midwest have suffered during the present decade are cruelly hard on game birds and animals as well as on crops and livestock, Douglas E. Wade of the University of Wisconsin stated. Game birds of all kinds, except pheasants, were badly reduced in numbers during the 1936 drought.

Many causes may have been set in operation by the drought, besides the obvious one of food and water shortage. The available wild foods may have had their vitamin content reduced, as vitamin C was reduced in tomatoes by the drought. Rodents, driven by starvation, gnawed bark and girdled food plants.

Eggs Cooked by Sun

One undoubted factor was the cooking of eggs by the pitiless sun. Thousands of nests were thus ruined. Pheasants seemed to have wit enough to abandon a batch of dead eggs and start again, but other birds stuck to their nests in futile and tragic loyalty.

Enemies of quail are usually thought of in terms of foxes, rats, occasionally owls. But in the quail territory of the Southeast a species of ant, the fire ant, has to be taken into the reckoning as

an important cause of quail life destruction, reported Bernard V. Travis of the Bureau of Entomology and Plant Quarantine, U. S. Department of Agriculture.

These ferocious swarming insects attack the eggs as soon as they have been pipped, or the newly hatched quail chicks while they are helpless. They kill from 4 to 16 per cent. of the quail hatch each year.

Predators of the more conventional types, such as foxes and owls, have a greater apparent effect on quail in the Southeast than in the Midwest, it was disclosed in a joint paper by Paul L. Errington of Iowa State College and Herbert L. Stoddard of the Georgia Cooperative Quail Study Association. Smaller numbers of birds and beasts of prey seemed to get more of the quail in the Southeastern region.

Importance of Rats

The investigators did not undertake to present a hard-and-fast explanation, but they suggested a third angle to the problem. In the Southeast, the stock diet of the predators is based on the cotton rat, which is subject to sudden and drastic fluctuations in its numbers. It may well be that at such times the predators, short of cotton-rat meat, may turn to other sources and thereby place very heavy "predation pressure" on the game bird population.

Housing problems are felt as acutely by wild birds as they are by human beings, and one of the immediate responses to anything like a solution is met by birds as it is by the featherless biped population—with an increase in reproduction rate. This was indicated strongly in a report by W. F. Kubichek of the U. S. Biological Survey.

Mr. Kubicheck described the measures taken by federal and cooperating workers to restore home conditions to normalcy for both water and upland birds: low dams to refill old ponds and swamps, planting of brush patches for shelter, even the construction of leantos where emergency demanded, planting of patches of food plants.

And the birds came back: "Prairie hens and sharp-tailed grouse have increased tenfold in one year. Waterfowl nesting on federal refuges are exhibiting remarkable annual gains. Other water birds, such as gulls, terns, cormorants, etc., by their invasion of the refuges indicate that the ideal condition is being approached on the federal refuges for all forms of wildlife."

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RETURN OF THE PRONGHORN

Once more numerous even than the bison that covered the plains of the West, the pronghorn has come even nearer extinction. Carefully tended by wildlife administrators, they are now showing signs of a comeback.

EUGENICS

Fear of Children Causes Intellectuals' Race Suicide

RECENT research throws the problem of race suicide directly into the lap of psychologists and educators.

Heretofore it has been a widely held idea that Americans of the more intellectual and economically superior classes were not having large families because they were not able to do so. Health conditions, inferior physical constitutions would prevent those living the soft life of wealth from giving birth to large numbers of children or would cause them deliberately to limit the number of offspring, it was reasoned. Somehow, Nature would balance the gift of mental superiority against a biological inferiority. Men would forfeit a high biological survival for a chance at a sort of intellectual posterity.

Actual research has thrown doubt on the theory of lessening fertility. Now a new study conducted by Dr. Paul Popenoe, of the Institute of Family Relations in Los Angeles, leads him to make the direct accusation that more than two-thirds of the childless homes studied in California are so because the might-be parents simply do not want children.

Why don't married people want children?

The chief reason, as determined by confidential questioning (not of the parents themselves, but of close relatives and friends) is selfishness. They do not want to be bothered. The wife's career is second in importance.

Economic pressure and marital discord are relatively unimportant, eugenics is negligible.

But looming large in influencing both husband and wife is a neurotic fear of childbirth and of the presence of children in the home.

"A striking commentary on present-day education," says Dr. Popenoe of this strange condition in which married adults are actually afraid to bring children of their own into the world.

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ASTROPHYSICS

Smithsonian Institution Closes Sinai Observatory

THE SOLAR observatory on Mt. St. Katherine on the Sinai peninsula, between Africa and Asia, operated during the past five years by the Smithsonian Institution, has been closed. The station was established in this historic spot to obtain data on the daily fluctuations in solar radiation. Difficulty in transporting supplies to its summit during the winter was one determining factor in the decision to suspend operations, at least for the present.

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