

## Conservation Problems of the Inland Empire

By MRS. E. L. DENNIS

Spokane, Washington

In presenting these conservation problems of the Inland Empire I come to this meeting as a member of the general public, not as a true scientist. I am a nature hobby enthusiast who has enjoyed, taught and studied nature for many years because I want to, and because I think people of the Inland Empire need to do so. For many years I have enjoyed teaching children's groups and helping the leaders of children's outdoor groups to enjoy nature lore.

A keen interest in conservation has naturally become a part of these studies and activities and certain problems have been faced.

Will you turn with me the pages of my conservation notebook, a collection of news clippings covering these problems and carrying them over a period of several years; mainly from 1936 to the present date?

I feel strongly that if the present generation of people living in the Inland Empire do not face these conservation problems with more intelligence and courage than is now being used we will be guilty of stealing from the next generation and those to follow it. Less than two generations of white people have lived their lives in the Inland Empire. We can rightfully suppose that many more will live here. We two have used more than our share of everything. We have wasted the plenty which we found here; the plenty that was intended for all generations to come.

I need not talk to you of soil and forest problems. They have been recognized and are being studied and corrected as you know. There are other problems.

One of enormous importance to future generations is the waste of bird life. Many ornithologists think that if birds were to disappear from the earth

mankind would disappear also in less than a year. After studying the economic importance of birds for several years and watching what birds eat, I doubt if the last few months of that year would be worth living.

From the Pasco region have come startling reports of grasshopper and cricket invasions each year since I started this notebook. By last summer they had spread to many other towns—Grand Coulee, Davenport, Sprague, Colfax, Creston, B. C., my own vacant lot and many communities in Colorado, Idaho, Oregon and Montana. Such headlines as these cover the pages devoted to insects—"Hopper Cloud Falls Like Rain," "Munching Horde Ruins Ranchers," "Cricket Menace Becomes Grave," "Hopper Horde Imperils Crops."

Turn to the pages of rodents in the Inland Empire. I remember reading articles telling how field mice have ruined parts of the Ohio Valley and sections in Pennsylvania and New England. Here are stories about poisoning ground squirrels and gophers, farmers warring on rats in the Fairfield area, apple growers battling mice near Yakima, jack rabbit and mice menaces to farmers' crops and rabbit plagues in the Davenport area. There is a statement of T. B. Murray of the Biological Survey saying that injury by rodents may amount to 99.4 per cent on deteriorated range lands.

I can't help remembering the fat ground squirrels that used to scamper over the ranges of our old cattle ranch and the clean little circles that began at the front door of each squirrel and spread until there was not much left for the cattle and us, in early spring.

Searching through the clippings for answers to these situations there are headlines about great amounts of money being spent by state and federal

governments. I read of poison bait, fighting crickets by fire and by hand, of traps and rodent or vermin control contests. I find that hawks, owls and gulls ate steadily against the cricket invasion at Pasco. The United States Biological Survey reports that most of our hawks and owls are definitely beneficial in the Inland Empire because they feed largely on grasshoppers, crickets and rodents. A report from the Yakima valley and a study made recently at the University of Idaho uphold that statement, but I find no clippings about hawks and owls being invited by man to help him. I read of no one bringing over a few extra gulls to help at Pasco. Birds are even being discouraged in many ways. Many vermin contests list hawks and owls as vermin and offer bounties for them. Some do designate the few destructive species but the hunters frankly admit they can't tell one hawk from another and some were seen late in 1939 shooting at beneficial owls. Last year one was seen trying to kill a sparrow hawk which feeds almost entirely on grasshoppers and small rodents. One report of a contest gives credit to one hunter for the death of 74 hawks and to another for the death of 98 owls. Any person who knows the birds of the Inland Empire is sure those men did not kill that many destructive birds. They just could not find that many.

I have often hiked all day and not seen one hawk, and most of those seen are beneficial species.

Scientific people of the region should put out such a campaign of education on the value of hawks that no one would dare kill a good one. The coming generations will all need hawks and owls and gulls. We need to know how to encourage and protect them and let them do this insect control that is costing the government \$2,000,000 in money each year and several times as much in produce.

Orchards and city parks are being eaten up by insects that song birds like

for food and many of these pests have spread to native plants and are ruining some of our most beautiful natural parks. All over the area oyster shell scale is killing willows, dogwood and many other shrubs and trees. Yet almost all parks do the very things that drive birds away. They spray, cut out all brush heaps and hedges that give birds nesting sites and safety, and allow water supplies to dry up.

Our forests are being damaged each year to the tune of many thousands of dollars by insects such as bark and engraver beetles. Woodpeckers used to keep these tree enemies under control but woodpeckers are still being used as targets by youngsters who do not understand.

Wild flowers make one of the best tourist attractions known and give the inspiration and relaxation of colorful beauty to citizens of the Inland Empire. Thousands of people go to Rainier and California and other famous flower gardens of the world and out to drive in the spring. But wild flowers are not sure to be here in the future years as things are today. Even though we have a state law protecting them along the main highways, people pick armloads at the very roadsides. We saw them doing it last spring. We saw them spring before last and will likely see them doing it again next spring.

The country is full of people who remember lovely flower displays from pioneer days in the Inland Empire but who find only an old forest burn or an over-pastured hillside when they go to see them again today. Many of our most beautiful wild flowers such as the Lady Slipper or *Cypripedium* and the Indian Pipe were quite well known to early flower lovers but will never be seen by most people now living. What will be left for your children and their children and grandchildren?

This wild flower situation can be corrected. It is caused by several problems that science can solve.

First—many people have had no op-

portunity to know one flower from another nor to become acquainted with the conservation facts of the area. What natural science is taught is often given by teachers trained in the east or in California. We need to establish a training center for science teachers for the Inland Empire. The Inland Empire is individual in her flora and bird life. Her problems are her own and her own people can solve her own future best. They understand her.

Ever since I started my hobby I have been looking for a good book that would help we know "What flower is this?" I think I have seen every book in publication but I am still looking. No book is complete and they all differ in both scientific and common names. There is no common language of flowers in the

great basin of the northwest. There is no book for the lay person without knowledge of scientific terms.

There needs to be a publication which will keep nature lovers up-to-date on the scarcity or abundance of certain species, the reasons for protective rules and laws and there need be reserves set aside to keep forever as breeding grounds of plants and birds.

Many scientific studies will be needed in work on each problem presented to you here today and surely it is fitting that science of today works for the people of tomorrow. I sincerely hope that the members of the Northwest Scientific Association will choose some of these problems for solution in the near future.