## TEACHING CONSERVATION IN INDIANA

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Conservation is a word often misunderstood by the people of Indiana. Many think it means to horde—to save—as did old King Midas in days of old when each night by the dim candle light he counted over his pieces of gold. The time came when King Midas died, and as far as he was concerned his gold did him no good.

Conservation of our natural resources does not mean this. It means the wise use of our natural resources. For example, if one has a 20 acre woodland plot and builds a high fence around it, leaving it always as it is, he is conserving as King Midas did; but if he uses the woodland wisely, he takes out each year for use the mature timber to allow the younger trees an opportunity to get light and space in which to grow and come to maturity. He would eliminate undesirable species and propagate those which are desirable. Conservation today means the wise use of the resources we have, not for ourselves alone because we have all the trees, flowers, water, fish, animals, and birds we need for existence, but for the benefit of the many unborn citizens that will come after we are gone. If we conserve wisely, they may enjoy and use the natural resources and natural beauties, which should be the nation's heritage to them for the years which are to come. Consequently, the conservation program is one whose aims are far-reaching and worth while because it lives for the future.

Most people in Indiana today do not understand the meaning of conservation and are not using our resources to the best advantage. Under the able direction of Mr. Richard Lieber the Conservation Department of the State in co-operation with other departments in other states and the national government is endeavoring to put the great conservation program into effect. The department is divided into six divisions, each with its respective superintendent, as follows:

Land and Waters, Capt. Charles G. Sauers; Engineering, Mr. Denzil Doggett; Geology, Dr. William N. Logan; Entomology, Mr. Frank N. Wallace; Forestry, Mr. Charles C. Deam; Fish and Game, Mr. George N. Mannefeld.

The state legislature makes the conservation laws and the fish and game division provides game wardens to enforce them. However, the greatest need is for education of all the people in the state along conservation lines so that legislative enforcement may become less necessary. To this end Mr. Lieber and others of the department spend much time addressing various organizations over the state, but they have many other duties and cannot spend their entire time explaining conservation.

Therefore there is need of a man to spend full time over the state lecturing and explaining conservation to the people, especially where

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education does its greatest good, that is, to the young people of the state, the boys and girls in the schools, so that these future citizens may have an understanding of the needs of conservation when they take their places in our communities. This need had long been felt in the state, so during the latter part of the year 1924, arrangements were made between the National Association of Audubon Societies of New York and the Conservation Department of Indiana whereby Mr. Alden H. Hadley of Monrovia was employed to spend nine months of each year lecturing over the state on birds and conservation. Mr. Hadley's title was Field Worker on Birds and Conservation for the Division of Fish and Game of the Department of Conservation, and he worked in co-operation with the National Association of Audubon Societies.

Mr. Hadley, ex-state president of the Audubon Society and donor of the Hadley Collection of Bird Skins to Earlham College, began his work on January 10, 1925. He was furnished an especially equipped Ford roadster carrying a stereopticon lantern, 200 colored slides of birds belonging to the Conservation Department, and about 200 colored bird slides from photographs of his own, a large curtain screen with carrier attached to the side of the car, literature on conservation and junior Audubon work, and charts and books on nature study.

His duty was not only to speak to children in the schools but to speak on problems of conservation to any and all groups of adults, including civic clubs, farmers, sportsmen, parent-teacher's groups, and women's clubs. Mr. Hadley continued this work until March 1, 1926, when his resignation took effect that he might become assistant to Dr. T. G. Pearson of the National Association of Audubon Societies in New York City.

The success of the work in the state was assured by the work of Mr. Hadley who had paved the way, organized the work, outlined the policies, and acquainted the people of the state with the conservation idea. Thus when the Conservation Commission appointed as his successor, Mr. Sidney R. Esten, of Indiana University, requests for lectures over the state were on hand to keep him busy for two months. Requests for lectures are constantly coming in and a program for at least two months in advance is easily made. A translux daylight screen and many new slides have been added to the equipment.

The following lectures are now available or will be available by September 1, 1927:

No. 1. A lecture on birds for first to fifth grade children. This lecture is in story form, modeled after Thornton W. Burgess's bird book for children. 35 slides.

No. 2. A lecture on birds for sixth to eighth grade children introducing, in addition to the birds, insects, frogs, and snakes. 50 slides.

No. 3. A lecture on conservation for high school students and adults. This deals with forestry, trees, streams, fish, water pollution, animals, flowers, insects, and birds. 65 slides.

For adults the following lectures are available:

No. 4. A general lecture on bird study and value of same. 83 slides.

No. 5. Uncommon and interesting birds. 51 slides.

No. 6. Bird Nests and Bird Protection. 79 slides.

No. 7. Economic Ornithology. 80 slides.

No. 8. Shore and Game birds. 40 slides.

No. 9. Hunting and fishing, especially adapted for fish and game clubs and Isaac Walton Leagues. 60 slides.

No. 10 and 11. The Mountains of our Northwest and Conservation in the State of Washington. 110 slides.

No. 12 and 13. Trees and Forestry problems. 120 slides.

No. 14. Insects. 80 slides.

No. 15. Flowers. 60 slides.

No. 16. State Parks. 60 slides.

A summary of the work from January 10, 1925, to December 1, 1926, by Mr. Hadley and Mr. Esten is as follows:

| 1.  | Grade School Groups           | 522 | talks   | to | 101,378    | people |
|-----|-------------------------------|-----|---------|----|------------|--------|
| 2.  | High School Groups            | 88  | "       | "  | $24,\!883$ | "      |
| 3.  | Normal School Groups          | 10  | "       | "  | $1,\!575$  | "      |
| 4.  | College Groups                | 13  | ""      | "  | 2,900      | 66     |
| 5.  | Junior Girl Groups            | 6   | <i></i> | "" | 240        | "      |
|     | (Campfire, Girl Scouts, etc.) |     |         |    |            |        |
| 6.  | Boy Scouts                    | 5   | "       | "  | 475        | "      |
| 7.  | Civic organizations           | 22  | " "     | "" | 1,400      | "      |
|     | Woman's Club Groups           | 10  | "       | "" | 960        | "      |
| 9.  | Parent Teacher Groups         | 15  | "       | "  | $3,\!197$  | "      |
| 10. | Teachers Groups               | 5   | ""      | "" | 380        | "      |
| 11. | General adult groups          | 9   | " "     | "" | 1,195      | "      |
| 12. | Bird and Nature Groups        | 19  | "       | "  | 1,385      | "      |
| 13. | Sportsmen Groups              | 10  | "       | "  | 1,200      | 66     |

The complete summary shows that in the 17 months of actual work in the field, 760 lectures averaging 40 to 50 minutes each have been delivered to 140,980 people. The total number of speaking hours was 570, the average number of talks a month was 45, and the average number of people spoken to each month was 8,281. The average number of people hearing each talk was 180 and the smallest group spoken to was 15 at a small district school in Dubois County. The largest groups spoken to at one time were groups of 1,200 each at the Crawfordsville High School and at the South Side High School of Fort Wayne.

One of the main features of the work among the grade children from the first to eighth grades, Boy Scouts, Girl Scouts, Camp Fire Girls, and nature groups is the organization of Junior Audubon clubs.

The record of Indiana's progress in the increased interest in bird study of the boys and girls of the State as shown by Junior Audubon membership is as follows:

| June 1, 1924      | June 1, 1925 | June 1, 1926 |
|-------------------|--------------|--------------|
| 1st New York      | 44,518       | $45,\!949$   |
| 2nd Pennsylvania  | 39,875       | 38,798       |
| 3rd Ohio26,581    | 20,428       | $26,\!670$   |
| 4th Indiana       | 16,083       | $22,\!337$   |
| 5th Massachusetts |              | $21,\!532$   |

Junior Audubon membership means that the boy or girl has joined a group and has received six pamphlets, each pamphlet telling of a different kind of bird and each containing a colored picture and one uncolored picture for coloring of each of the six kinds of birds. The boy or girl also wears a club button, a different kind being issued each year. When a group exceeds 25 in number it is called a club and the teacher gets for that club a year's subscription to "Bird Lore." Junior Audubon membership is emphasized to the child as standing for three things: Bird interests, organized bird study, organized bird protection.

Thus the conservation idea is being planted in the hearts of the boys and girls that they, as they grow older, may become conservationists of the future and teachers of conservation to future generations. That which begins by education in a small way today will be felt by millions of future citizens of our nation. With adults various phases are taken up according to the desires or needs of the group.

During the 17 months of the work, about 21,000 miles have been covered over many parts of the state, a distance more than equivalent to three transcontinental trips from New York to San Francisco and back.

It is amazing to note the increased interest shown throughout Indiana by men and women in various walks of life whose work and interests would appear to carry them far away from nature. Deep within them is a keen sense of the beautiful things in nature and an enthusiasm for nature study which makes them eager to hear of the flowers, trees, insects, animals, and birds.

The systematic teaching of conservation in Indiana by a field lecturer is only in its infancy, but the experiences and results shown by the past two years bid fair for greater and more far reaching effects and influence in the years which are to come.