THE ARBOR DAY, PARK AND CONSERVATION MOVE-MENTS IN IOWA

By L. H. PAMMEL

(Continued from January Number)

CONSERVATION

J. M. Elder of Concord, Iowa, Hancock County, a pioneer settler who made large contributions to the horticulture of the state, and especially Hancock County, was an early friend of conservation, writing under the title of "Friends and Enemies."241 It was my pleasure to know Mr. Elder as a warm friend of the great out-of-doors. In the paper above referred to he made a strong plea for the conservation of useful birds and animals, and deprecated the destruction of our noble animals, especially the destruction of the beaver, and said that we would see the destruction of the other animals like the antelope, deer, elk and moose, unless we speedily enacted laws for their protection. He made a plea for the hawks and owls, who catch rodents like mice. He advocated giving the youth instruction in the knowledge of our friends in the lower order of creation in order to distinguish friends from enemies. And here we may add the plea of W. S. Warfield, "A Bird Lover's Garden," who notes the usefulness of elderberry (Sambucus Canadensis), wild crab, and hawthorn. Dr. T. C. Stephens²⁴² gives "A Review of Wild Life Protection in Iowa." He gives Major Lacey credit for his pioneer work and also credits the great labor of W. T. Hornaday. This paper is somewhat historical and reviews the progress of this kind of conservation. A paper by O. A. Byington, 243 and John C. Hartman244 in a paper "A Good Year for a Good Cause" refer to the federal laws and the closed season for the quail and prairie chicken.

Former Governor George W. Clarke in a most interesting paper, "Pages from Bygone Days in and About Drakeville, Iowa,"245 refers to the abundance of animal and native plant life in the region of Drakesville sixty-four years ago.

"In those days there was a bird life that is gone, never to be

²⁴¹*Ibid.*, Vol. XXV, p. 71, 1891. 242*Ibid.*, Vol. LIII, p. 390, 1919. 243*Ibid.*, Vol. LIII, p. 398, 1919. 244*Ibid.*, Vol. LIII, p. 396, 1919. 245*A*NNALS OF IOWA, Vol. XIV, pp. 323-56, 1924, 5 f,

seen again except in the imagination of the 'old settler.' How real it was in the springtime when the migratory birds were in the sky and among the trees! The long lines of pigeons stretching across the sky for miles, sweeping towards the north! And the majestic sweep of the wild geese led by an old gander, while ducks were in great abundance."

Then he discusses in a very interesting way when on spring mornings the cock prairie chicken could be heard in every direction. The "oom-boom-boom-boo" could be heard on every hand, and there were large numbers of these fine prairie chickens perched upon the rail fences. Governer Clarke describes the drumming of the pheasant. There are not many of these noble birds left.²⁴⁶

One of the journals published in Iowa, The Wilson Bulletin, a quarterly magazine of Ornithology, published in Iowa under the auspices of the Wilson Ornithological Club, with Dr. T. C. Stephens²⁴⁷ as editor, presents many fine items on conservation. An interesting item on the movement to plant the ring necked pheasant and possibly the Hungarian partridge in suitable areas throughout the country occurs in the September issue of the magazine.

Evidently Dr. Stephens is opposed, and rightfully I believe, to supplanting our native birds by these introduced species. He states: "Before any concerted effort in behalf of bird protection can be again undertaken, new declarations and alignments will have to be made and appraised. The last great piece of federal legislation in behalf of bird life, which was passed by Congress early in 1929, was sponsored chiefly by Dr. Hornaday and a section of sportsmen headed by Forest and Stream and Outdoor Life. It is our understanding and belief that the National Association of Audubon Societies had the misfortune to be aligned with the opponents of this greatest piece of bird protection ever enacted, with the possible exception of the Migra-

²⁴⁶I might call attention to the myriads of passenger pigeons migrating north in the spring and southward in the autumn at LaCrosse, Wisconsin, not far from the Iowa line. In the seventies these flocks of pigeons sometimes reached from the banks of the Mississippi to the bluffs three miles away. They were caught in nets and slaughtered and taken to market by the wagon load and sent to Chicago, New York and Boston. Large numbers of ruffed grouse and prairie chicken occurred in the same region. The ruffed grouse is now rare and the prairie chicken still rarer, I have not seen one for years in that vicinity and the passenger pigeon is gone.

247The Wilson Bulletin, Vol. XLI, p. 187, 1929.

tory Bird Law. So we believe that a new alignment in bird protection leadership must develop in the next few years."

Dr. B. Shimek²⁴⁸ on the subject of conservation discusses injudicious drainage. The engineers should not always decide the matter. Community interests are greater than the individual. In another paper, 249 "Iowa's River Bluffs," he urges reforestation. Beauty is sentiment; it is far better than sordid interests. In a paper on "Conservation for Natural Scenery in Iowa"250 he states that the requests for parks come from all persons, but there are other reasons for conservation. A list of national parks is also given by him.251

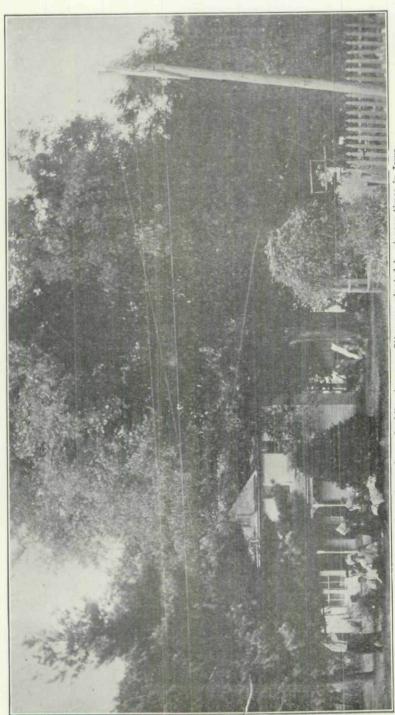
The necessity for birds was shown by Mrs. Florence L. Small²⁵² in a paper, "Utility of Birds in Orchard and Woodland." She stated that in 1900 there were 6,000,000 farms in the United States with 842,000,000 acres in cultivation. The loss from insects amounts to \$1,000,000,000. The birds and forests are important for the farms of the United States. Frank Pellett²⁵³ had two excellent papers on the relation of birds to agriculture, one of these on the catbird and robin, and one on birds of prey and the use of these birds on the destruction of mice and other rodents. In this connection mention may be made of the bird refuge started by Mr. Pellett on his home place about five miles from Atlantic, now also a plant refuge. Mr. Pellet aims to give woodland plants and birds a refuge.

Ellison Orr in a paper, "Conservation and Education,"254 urges that we give more attention to the educational side of conservation.

Eugene Secor in a paper, "A Glance Backward,"255 refers to the destruction of magnificent walnut trees in Iowa. He refers to the introduction of the white willow in Iowa, 1865-66, as the beginning of windbreak planting. Even today he says persons look at a tree to see how much cordwood it will make.

Fred Smith²⁵⁶ makes a plea for the growing of our native wild

²⁴⁸Report Ia. State Hort. Soc., Vol. V, p. 61, 1871.
249Ibid., Vol. XLVII, p. 128, 1913.
250Ibid., Vol. LIII, p. 874, 1919.
251Ibid., Vol. LIII, p. 864, 1919.
252Ibid., Vol. XLVI, p. 298, 1912.
253Ibid., Vol. XLVI, p. 154, 1909.
254bid., Vol. IV, p. 851, 1920.
254bid., Vol. L, p. 51, 1916.
256Ibid., Vol. LI, p. 484, 1917.



The famous Lowenberg elm and white pine near Ottumwa, planted in pioneer times in Iowa.

flowers. These plants should be given natural conditions. H. S. Conard in one of his papers read before the Iowa Conservation Association makes a plea for our wild flowers.

In a paper, "Relation of the Community to the Preservation of Wild Plants,"257 he says: "Those of us who live in temperate climes have a natural heritage we would do well to appreciate. No, my friends, the glory of the earth covered in unbroken verdure and adorned with acres and miles of brilliant flowers is given only for the delection of the dwellers in temperate zones." Today many people in Iowa are making use of our native plant material.

H. S. Dart²⁵⁸ on the subject of "The Companionship of Trees" says it is important that we keep before the public the sentiment in regard to the tree grown old, and in the different questions that come up that we remember the sentiment expressed in the lines:

> Woodman spare that tree, Touch not a single bough. In youth it sheltered me, And I'll protect it now.

It is important to instruct the youth if we wish to plant for the future. This has been recently so well expressed by Dr. J. N. Martin²⁵⁹ also, that if conservation is to come before the people it must be taught in the public schools.

James H. Lees in "Some Geologic Aspects of Conservation" 260 gives in a concise and good form the geology from the standpoint of conservation. It is a fine brief treatise.

T. C. Tanner in "The Rural Home" quotes Dr. Beardshear saying "In the town we have the limited horizon, in the country we have a horizon touching the friendliness of the very tree tops and illuminated by glories of myriad stellar worlds."

A. Lefevre 262 in "The Tree" says "I believe it to be the king of all plant life." He calls attention to the sequoia as the oldest living thing.

Dr. B. Shimek²⁶³ made an eloquent plea to interest the public

²⁵⁷Ibid.. Vol. LIII, p. 385, 1919.
258Report Northern Ia. Hort. Soc., Vol. XXV, p. 75, 1891.
259Bul. Ia. State Parks, Vol. III, p. 67, 1925.
260Report Ia. State Hort. Soc., Vol. LIII, p. 410, 1919.
261Ibid., Vol. LI, p. 109, 1917.
262Ibid., Vol. LI, p. 302, 1917.
263Ibid., Vol. XLIV, p. 65, 1919.

in forestry and reported a resolution on conservation, and extolled the work of Gifford Pinchot on forestry and conservation.

L. H. Pammel,²⁶⁴ at a meeting of the Horticultural Society in 1901, reported a resolution to set aside some 800,000 acres of land and water for a national park and a forest reserve in Minnesota. There was a bill before Congress on a proposed purchase in Minnesota, and other waste lands in Wisconsin for the same purpose, and that the forestry work be co-ordinated and consolidated. The national forests were then taken care of by the United States Geological Survey, the United States Land Office and the United States Department of Agriculture. The society recommended that this work preferably be taken care of by the Department of Agriculture. This actually was later done largely through the efforts of the scientists and botanists of the country and Major John F. Lacey.

Governor William Larrabee should be counted among the early conservationists of Iowa.²⁶⁵ On his place he set out a large number of trees, especially white pine. These trees grew splendidly and constituted an object lesson to the people of that community of what can be done in the way of growing trees.

Miss Fern Bonnell of Iowa City writes that James H. Bonnell set out some white pine trees in front of their present house in May, 1855. One of them now measures nine feet in circumference eighteen inches above the ground. He also set out some elm trees in 1853 which are now nine feet in circumference. (See cut on page 102.)

Many splendid articles on conservation are contained in the reports of the Ames Forester. Mention might be made of articles by such men as G. B. MacDonald, G. C. Morbeck, J. A. Larsen, D. S. Jeffers, Fred Trenk, Arthur Carhart, and J. E. Guthrie, and also the annual report of the Iowa Conservation Association, which was ably edited by Prof. G. B. MacDonald. Many fine papers on conservation will be found in these volumes. Unfortunately the volumes are out of print.

Dr. B. Shimek,²⁶⁶ always interested in conservation, had charge of a school of instruction on conservation at the State University. The first meeting was held in 1925. This school has done

 ²⁶⁴Ibid., Vol. XXXV, p. 93, 1901, 14 f.
 265Bull. Ia. State Parks, Vol. III, p. 67, 1925,
 266Ibid., Vol. III, p. 43, 1925.

much free service among the teachers of the state and others who attended the meetings. The value of this school will be felt for years to come.

Thre are also many fine articles in the Iowa Conservation Magazine by Frederick J. Lazell, W. T. Hornaday, H. B. Bailey, B. Shimek, J. H. Lees, G. B. MacDonald, L. H. Pammel, Mrs. H. J. Taylor, T. C. Stephens, Mrs. C. H. McNider, Ellison Orr, Rev. George Bennett, Charles J. Spiker, Thomas H. Macbride, Kathleen M. Hemphill, Edgar R. Harlan, Stephen T. Mather, George F. Kay, Ervin E. Reed, Carrie Sondrol, Robert B. Wylie, Mrs. Francis E. Whitley and Florence L. Clark.

Seven volumes of the Iowa Conservation Magazine were issued. These volumes will be found invaluable for those interested in conservation.

About the time of the close of the life of Rev. George Bennett a journal was started by him known as Wild Ways. Only one number was issued. Rev. Bennett was responsible in part for the editorial material in the Iowa Conservation Magazine. A sketch of his life was published in Horizons for 1928.

The quarterly journal, Horizons, contains much valuable material pertaining to conservation and parks. This is largely gotten out under the direction of Prof. P. H. Elwood.

Much detailed information concerning the conservation movement will be found in the Iowa Conservation Magazine on such topics as "The Passage of the Quail Bill"267 by O. A. Byington, "What was Accomplished in Regard to State Parks in the Last General Assembly"268 by B. J. Horchem, who was a very active supporter of conservation and park work while a member of the legislature, and such articles as "Preserving the Indian Mounds Along the Mississippi River"269 by Ellison Orr, "Conservation of Natural Scenery in Iowa"270 by Prof. Shimek, "In the Interest of Nature Conservation"271 by Rev. George Bennett, and "Bird Conservation"272 by Althea R. Sherman, in which she makes a plea to erect a monument to the birds of Iowa, saying "To Iowa birds no monuments have been raised, but yet it is a

²⁶⁷Iowa Conservation Magazine, Vol. I, p. 35, 1917. 268Ibid., Vol. I, p. 36, 1917. 269Ibid., Vol. I, p. 45, 1917. 270Ibid., Vol. I, p. 52, 1917. 271Ibid., Vol. I, p. 54, 1917. 272Ibid., Vol. I, p. 54, 1917. 272Ibid., Vol. IV, p. 72, 1921.

safe venture to say that the people of no other state in the Union have received greater benefits from birds, while doing so little to honor their benefactors." Ervin E. Reed of Monticello in "A Page of the Rock Record" gives a plea for the preservation of the rocks found in a proposed park near Monticello. The park proposed included river, river plain, bluffs, hills and woods. He calls attention to the fact that Prof. Calvin when a young man taught school in the vicinity of this proposed park and that he and Dr. Macbride wandered over these very hills and studied these fossils. There we find the true Dolomite limestone.

Mrs. Francis Edmund Whitley,²⁷⁴ always interested in state parks, published a splendid paper on our state parks in which she makes the following statement: "Looking back to the beginnings of the movement for the creation of state parks, it seems strange to recall the hesitation with which the idea was first received. Now the more intelligent citizen is ready to admit that not less, but more parks are desirable, for they have so conclusively demonstrated their value from every point of view."

Conservation Council

The Meredith Publishing Company, in order to bring together conservation interests of the state, called a meeting in the offices of the Meredith Publishing Company. This meeting was presided over by E. N. Hopkins. At this meeting was organized the Iowa Council of Conservation Organization.²⁷⁵ The purpose of this council was to bring all of the conservation interests together in one body so that the legislative work of conservation might become more effective. There were representatives from the Audubon Society, Iowa Conservation Association, Garden Clubs, Farm Bureau, Iowa State Horticultural Society, Iowa State Board of Conservation, and Isaac Walton League.

The Isaac Walton League has in recent years taken a splendid part in the conservation of our natural resources, and this organization in Iowa is recorded as favoring an expansion of the park system. This organization recognizes the importance of recreation.

The Fish and Game Department has done much along the

 ²⁷³Ibid., Vol. IV, p. 96, 1921.
 274Bul. Iowa State Parks, Vol. I, No. 4, p. 15, 1923.
 275Ibid., Vol. IV, p. 52, 1926.

lines of conservation. The present game warden, W. E. Albert, who received his first appointment in 1919, has sanctioned practically all of the dams placed at the outlets of the lakes, and those were constructed out of the funds of the Fish and Game Department. It maintains, in the interest of conservation, fish hatcheries; one trout, in the Backbone State Park in Delaware County, as well as fish hatcheries at Clear Lake, Spirit Lake and elsewhere. The department also does much fish rescue work along the Mississippi River. The fish rescued are distributed in the interior waters of the state. The department also looks after the violation of fish and game laws.

CONSERVATION OF SOIL WATER

Attention may be called to an interesting editorial by E. R. Harlan in Annals of Iowa entitled "Scheme for Conserving Iowa Subsoil Moisture"276 in which the author calls attention to the rapid runoff of water and the necessity of conserving it. Dr. S. W. Beyer in a very comprehensive address on "Some Problems in Conservation"277 calls attention to the removal of the natural vegetation which subjects the land to undue washing by rain and running water. He calls attention to the importance of conserving the ground water as a reserve supply from the standpoint of farm crops. It is a very interesting discussion of ground water. He quotes W J McGee²⁷⁸ as follows: "The chief cause of lowering subsoil water—the waste of storm and thaw water through surface runoff-is remediable, and with the advancement of science is bound to be remedied. Dr. McGee has made an exhaustive investigation of the lowering of the water level. He states that the average lowering for the entire country is about nine feet and for Iowa is twelve and one-half feet during the fifty years preceding 1910.

A very interesting study made under my direction by I. T. Bode,²⁷⁹ "The Relation of the Smaller Forest Areas in Nonforested Regions to Evaporation and Movement of Soil Water," indicated in the case of the Backbone State Park in Delaware County that hillsides covered with trees retarded the flow of

²⁷⁶Annals of Iowa, Vol. XV, p. 624, 1927. 277Proc. Ia. Acad. Sci., Vol. XXVI, p. 37, 1919. 278Bul. Bur. of Soils, Vol. 92, p. 178. 279Proc. Ia. Acad. of Sci., Vol. XXVII, p. 137, 1920.

water very materially. More moisture was found on tree covered slopes than those covered with grass.

There is also a very interesting discussion of the lowering of the water level in Iowa by James H. Lees²⁸⁰ under the title of "Well Water Recessions in Iowa." This paper discusses the five glacial drift sheets in Iowa, beginning with the oldest, the Nebraskan, followed by the Kansan, the Illinoisian, Iowan, and Wisconsin. The statement is made that where a lowering of water level in wells is noticed it is variously attributed to tiling and ditch drainage in so far as shallow changes are concerned, to greater demands from a vastly increased amount of stock, to local causes such as clogging of the aquifer, overdrafts on individual wells, or to the exhaustion of sand or gravel beds which had supplied wells.

The transpiration of water from plants has some effect upon the lowering of soil water. He quotes Raphael Zon in his paper, "Forests and Water in the Light of Scientific Investigations," that broadleaf forests intercept and return directly to the atmosphere 13 to 8.48 percent of the water. The statement is made, quoting from Floyd Nagler that the runoff of most Iowa streams is close to one-fifth of the rainfall. He quotes Dr. Bakke that a growing crop of corn uses in our climate about one-third of the annual rainfall and that the amount of water transpired by an acre of wheat is as much as 900 tons.

CONFERENCE ON AQUATIC RESOURCES

During the month of August, 1923, in connection with the American School of Wild Life Protection at McGregor, a conference on aquatic resources was held, which was attended by delegates from Minnesota, Wisconsin, Illinois and Iowa and several representatives from the national government. This conference discussed the clam production, fish farms and water resources. The conference passed resolutions asking that every effort be made to stop the drainage of the Winneshiek slough because of the great value of this slough for fish and clams. The conference elected Dr. A. T. Rasmussen of LaCrosse, Wisconsin, president, and Willis Bickel of McGregor, secretary.

²⁸⁰ Iowa Geol. Survey, Vol. XXX, p. 375-400, 1920, 5 f.

W. H. Dilg, president of the Isaac Walton League and an ardent champion for the preservation of this and other similar bodies of water in the Mississippi Valley, was present at this conference. Representatives from the United States Bureau of Fisheries were present.

Papers were read by R. L. Barney²⁸¹ on "The Relation of Reclamation of Bottom Lands to Mussel Culture," by A. T. Rasmussen²⁸² on "The Mississippi Valley Conference on the Value of Aquatic Resources," and a paper by Dr. B. Shimek²⁸³ on "Drainage of the Mississippi Sloughs a Mistake," one by Carlos Avery²⁸⁴ on "Preservation of Water Areas Vital to Wild Life" and a paper by C. F. Culler on "Depletion of Aquatic Resources, Causes and Remedial Measures."

As a result of this conference there was established by Congress a wild life refuge. 286 Members of the American School of Wild Life Protection, W. H. Dilg, A. L. Bakke, Congressman G. N. Haugen, Mrs. Francis E. Whitley, B. Shimek and others of Iowa were instrumental in the passing of this bill, and of course a large amount of credit should be given to the United States Biological Survey.

LAKE SURVEY

One of the fine conservation contributions is the Report on Iowa Lakes and Lake Beds by the State Highway Commission. While George W. Clarke was governor of Iowa a law was passed directing the highway commission make a report on the meandered lakes and lake beds of the state. This law is contained in Part Second, Chapter 2-B, Supplemental Supplement, 1915. J. W. Holden, H. C. Beard and A. Marston were members of the Highway Commission. A summary of the Report is as follows:

"Report of crop surveys in the vicinity of various lakes to ascertain damages resulting from black birds, prepared by Agricultural Experiment Station under direction of Prof. H. D. Hughes.

²⁸¹Bul. Ia. State Parks, Vol. I, No. 2, p. 13, 1923. 282Ibid., Vol. I, No. 2, p. 11, 1923. 283Ibid., Vol. I, No. 2, p. 15, 1923. 283Ibid., Vol. I, No. 2, p. 15, 1923. 284Ibid., Vol. I, No. 4, p. 12, 1923. 285Ibid., Vol. I, No. 4, p. 9, 1923. 286Ibid., Vol. III, No. 5, p. 91, 1923.

"Report on the vegetation of Iowa lakes, prepared by Department of Botany under direction of Prof. L. H. Pammel.

"Report on possibilities of improving Iowa's lake shores by forestation, prepared by Prof. G. B. MacDonald, Department of Horticulture and Forestry, Iowa State College."

The study of the vegetation along Iowa lakes was done under my direction by J. L. Seal and L. W. Durrell.

This volume contains literature on lake vegetation with reference especially to the work of Dr. B. Shimek,287 "Notes on Aquatic Plants from Northern Iowa," and a paper by R. I. Cratty, "Notes on the Aquatic Phenogams of Iowa," 288 papers by Robert Wylie²⁸⁹ and by R. E. Buchanan, 290 and references to earlier literature on aquatic plants. T. J. Fitzpatrick²⁹¹ and J. C. Arthur²⁹² made contributions to the flora of Iowa.

The Highway Commission made definite recommendations concerning the conservation of certain lakes. This report deserves a large place in the conservation literature in this state. It is also invaluable for the many fine maps printed with the report.

IOWA STATE DRAINAGE WATERWAYS AND CONSERVATION COM-MISSION

The Iowa State Drainage Waterways and Conservation Commission created by the act of the Thirty-third General Assembly made a report to Governor Carroll on December 31, 1910.293 This commission consisted of A. C. Miller, Des Moines; L. W. Anderson, Cedar Rapids; E. A. Burgess, Sioux City; A. F. Frudden, Dubuque; I. W. Keerl, Mason City; T. H. Macbride, Iowa City; and W. H. Stevenson, Ames. A. C. Miller was chairman and L. V. Hites, secretary and engineer. The Executive Committee consisted of A. C. Miller, T. H. Macbride, and W. H. Stevenson.

The subject matters considered in this report were drainage and conservation and C. G. Elliott, chief of drainage investigations of the United States Department of Agriculture, made an

²⁸⁷Bul. Laboratories of Nat. Hist., State Univ. of Ia., Vol. VII, pp. 1-90. 288Ibid., Vol. III, pp. 136-52. 289Proc. Ia. Acad. Sci., Vol. XIX, p. 131, 1912. 290Ibid., Vol. XIV, pp. 47-84, 1907. 291Manual of Flowering Plants of Iowa, 1899. 292Proc. Davenport Acad. Sci., Vol. IV, pp. 64-75, 1882. 293Rept. of State Drainage Waterways and Conservation Commission, pp. 1-206; Appendix A, pp. 209-210; Appendix B, Maps Pl 1-23, 1911.

extensive report on drainage, and O. G. Baxter discussed the drainage of the West Fork of the Des Moines River.

There is an exhaustive report on the development of water power and an exhaustive treatment of the Boone River development by L. V. Hites, and a paper on "Water Power of Northeastern Iowa" by W. F. Bickel, in which he concludes: "The whole industry would be benefited provided the state had some hand in the advisement and supervision over even the smallest improvements."

The article on "Soil," though not signed, was written by Dr. W. H. Stevenson. He says: "The building up of the fertility of our soils and the establishing of permanent systems of agriculture in our commonwealth are the most important phases of our conservation problem."

The article on "Lakes and Streams" was undoubtedly written by T. H. Macbride. The report says: "Every bit of practical conservation accordingly implies use. When we advocate the conservation of a lake, therefore, we do not mean simply that we would have a body of water occupying so much area on the ground, but we urge that wherever such body of water of convenient size and depth occurs it shall be kept, and kept in order, and used. It shall be open to all the people for their use and benefit, for their enjoyment.

"The same thing is true when we speak of conservation as applied to streams. Our streams are for use. Conservation bids us use them and use them wisely; likewise our forests, these shall not simply stand as in the ages primeval, they must stand and be productive, be used.

"Each year our people are coming to appreciate more and more the value of our beautiful lakes, of which we have too few."

The Commission recommended that the lakes of Iowa be at the earliest moment placed under special jurisdiction. There is a strong note on the conservation of our woodlands by Dr. B. Shimek.

Forest conservation is one of the broadest questions within the whole field of conservation. Directly or indirectly it concerns all phases of the great problem. The clearing of the forest has caused the disappearance of springs. "The state should control the rough lands along the streams of our state for the purpose of preventing the evil consequences of our present practice." The report suggests that these woodlands be made parks and game preserves.

Dr. T. H. Macbride, in two fascinating volumes entitled On the Campus, the first published in 1916, and the second in 1925, gives the addresses delivered at various times before university and college audiences, and such topics as "Plant Responses,"294 "Primeval Iowa,"295 "Public Parks,"296 and "Commencement on the Prairie"297 are discussed—also an interesting article on "Gitche Manitou" by Samuel Calvin. 298 These articles all have references to conservation.

IOWA GEOLOGICAL SURVEY

In this connection something should be said about the Iowa Geological Survey 299 in which there are often conservation notes. The Survey was under the direction of Samuel Calvin, and subsequently that of Dr. George L. Kay.

During the early organization Dr. Charles Reuben Keves served as able assistant. During many years Dr. James H. Lees ably assisted as assistant state geologist and in the preparation of papers for the Survey. Many fine papers on the artesian wells, Sioux quartzite, Silurian and Devonian fossils, and coal and gypsum deposits, have been prepared by the directors and assistants.

From the standpoint of conservation the county reports are most important. Such reports as the "Underground Water Resources of Iowa" bear on the subject of conservation. This is largely the work of W. H. Norton. The paper by Dr. S. W. Beyer on "Peat" is interesting from the standpoint of conservation.

Soil Surveys 300

Many of the soil surveys were carried on under the direction of W. H. Stevenson, with P. E. Brown, L. W. Forman and

²⁹⁴On the Campus, by T. H. Macbride, 1916, p. 173.
295Ibid., 1925, p. 11.
296Ibid., 1925, p. 110.
297Ibid., 1925, p. 276.
298Ibid., 1925, p. 179.
299Rept. Ia. Geol. Survey, Vol. XXI, pp. 29-1181, 1910.
300Soil Survey of Ia., Rep. No. 45. Des Moines County Soils, Rept. No. 45, pp.
1-72. 8 p and 1 map, 1927. A large number of other reports have been published.

others from the Iowa Agricultural Experiment Station assisting, and surveys were also made by the Bureau of Soils of the United States Department of Agriculture. A large number of county soils surveys have been made, of such counties as Des Moines, Dubuque, Emmet, Fayette, Floyd, Grundy, Hamilton, etc. These reports are splendid and often touch upon conservation problems.

THE STATE BOARD OF CONSERVATION

A public record of the minutes of the Iowa State Board of Conservation will be found in the Annals of Iowa. Said material was prepared by E. R. Harlan and D. C. Mott.³⁰¹

An editorial by E. R. Harlan states no other line of public work in Iowa in the last four years has shown such marvelous results as that of the acquisition of state parks.³⁰²

Mr. Harlan in a splendid address made before the Rotarians in Hotel Fort Des Moines on July 24, 1919, gave a fine outline of the work of the State Board of Conservation in preserving of scenic, scientific and historic Iowa areas. This address was published in the Annals of Iowa. This interesting, significant statement is made: "In Iowa it is but a short spin from prairie lands to fairy lands. Even with moderate roads one can ride from Des Moines in an automobile through certain settlements which resemble parts of the heart of Europe, and others of aboriginal Iowa nature. You can see a natural bridge rivaling that of Virginia; caves of equal scientific interest with that of Kentucky; hills, valleys, plants, and fossils, the glaciers left untouched; grottoes in which ice forms while the sun wilts the corn; lakes rimmed with boulders men cannot move."

This paper contains a splendid discussion of several aspects of the state parks. You can retrace the Mormon trail. You can see where the first settlements in Iowa were made. And here is another significant statement:

"But you cannot go swimming, boating, fishing, camping, nor play ball unless in cities, without trespassing. You cannot see one of the marvels I have named except over private lands; you

³⁰¹Annals of Iowa, Vol. XII, pp. 382, 471, 548, 623; XIII, pp. 57, 144, 224, 387, 473, 546, 625; XIV, p. 67, 1920-23, 3021bid., Vol. XIII, pp. 140-44, 1921, 3031bid., Vol. XIV, pp. 366-71, 1924,

encounter hundreds of signs, 'No Trespassing'; you examine nothing without consent."

Again quoting from this fine article:

"Appropriate provision will be made that the healthful may resort to the open air with safety, without contempt of fellow citizens, and with full self-respect. Areas unique for scenery will be acquired. Those embracing objects and materials useful or interesting in scientific study will be reserved. Grounds will be bought whereon occurred important scenes in early and recent social life; where prehistoric works exist; where lie the ashes of our great; where shafts that speak of all these facts should stand.

"The board believes the advantages are mutual between centers of population and the state at large and that there is, in justice, an implied ratio of cost based on resulting benefits of acquisition between these two."

In speaking of the wild life in the Keosauqua park Mr. Harlan refers to the coveys of bob whites and the old drumming pheasants or ruffed grouse and the fact that citizens voluntarily subscribed to make a wild life sanctuary out of lands adjacent to the state-owned land. The state park land was bought at a very nominal rate.

"The unique 'Keosauqua scheme' of helping the state purchase the tract was resorted to. Each interested individual subscribed the cost of an acre of the ground until the citizens had contributed \$6,400."

Then he refers to the fine gifts of citizens of Farmington in the purchase of the Farmington State Park.

The first meeting of the State Board of Conservation was held in the office of Treasurer of State E. R. Hoyt in Des Moines, on which occasion Mr. Hoyt, Gov. Harding, members of the Executive Council, and members of the Board appointed by the Executive Council, were present. At this initial meeting L. H. Pammel was elected chairman and E. R. Harlan secretary.

During the summer of 1918 before the Board was organized there was held a picnic in what is now Backbone State Park. This was attended by Mr. and Mrs. Byron W. Newberry, Mr. and Mrs. G. W. Dunham, Mr. and Mrs. E. R Hoyt, Judge and Mrs. Carr and others who were interested in sponsoring a movement for making a state park out of the Devil's Backbone. On this occasion the writer of this article made an address on parks.

Mr. Hoyt, who was treasurer of state at that time, was deeply interested in this park work and helped the movement greatly. To him the people of Iowa are especially indebted for his kindly interest in this work.

The early park policies of the state were clearly outlined in the address made by E. R. Harlan before the Rotary Club, referred to above.³⁰⁴

The State Board of Conservation had but few precedents in regard to state park policies. It is true that state parks had been established in Wisconsin, New York, Minnesota and a few other states, but the policies established in these states were only applicable in part to the state of Iowa.

Soon after the organization of the State Board of Conservation, the Board outlined certain general policies. One of these was to receive gifts from communities and citizens. In response to this policy the people of Farmington and Keosauqua made the first generous gifts. These gifts came largely from the suggestion of E. R. Harlan. The Keosauqua plan was worked out through several conferences that Mr. Harlan had with local citizens, and this plan was afterwards used in the purchase of land by private individuals in acquiring the Ledges State Park in Boone County. There were generous gifts from the people of Eldora and Hardin County in establishing Pine Creek Park, and also the gifts from the Lepley family to establish Lepley State Park, in honor of the pioneer families of Lepleys. Mention should be made of the gifts from people in Webster County in establishing the Dolliver Memorial Park and the gifts of citizens in establishing Bixby, Guthrie County Park, Fremont County Park, Clear Lake, Bellevue, Pilot Knob, Clear Lake, Wapsipinicon, Palisades and others.

Another early policy established by the Board was to recognize the importance of wayside parks because there was no way in which people could sit down and have a picnic lunch in groves and woodlands because of "no trespassing" signs. It seemed,

³⁰⁴ Ibid., Vol. XIV, p. 366, 1924.

therefore, important to the Board to recognize the establishment of wayside parks, and it was felt that in the course of time these would be scattered over the state.

The Board also recognized the importance of establishing historical parks, or establishing parks at historical spots. Certain parks, of which Fort Atkinson State Park may be mentioned, were established purely for historical reasons. Indeed such parks as the Lacey-Keosauqua and regions adjacent to it have many historical aspects, as much of the early history of the founding of our state took place in southeastern Iowa.

The Board also clearly recognized the importance of conservation in the establishment of state parks. It clearly recognized that not only should our plants but animals as well, and scenery, be preserved. This is well recognized in the creation of such large parks as the Lacey-Keosauqua, the Backbone Park in Delaware County, the Ledges in Boone County and the Dolliver Memorial in Webster County. It was felt that the state of Iowa could well afford to have a number of larger parks where the above points could be clearly recognized.

The Board also felt that areas typical of natural scenery and topography should be preserved. Therefore the Elbert State Park in Polk County was established where we have the interesting topography of the Coon River. The type of topography typical of the Des Moines River is preserved through such parks as the Dolliver Memorial, the Ledges and Lacey-Keosauqua, and the Iowa River topography by Pine Creek Park. It was felt, also, that such striking types of topography as are found in the Bixby Park, the Moorehead Caves and at Bellevue State Park, in Fremont County State Park, Guthrie Tract, and above all our lake parks would be representative of the topography, geology, and natural history of Iowa.

The Board, too, had in mind the establishment of prairie parks, and early secured legislation to set aside a tract of ground in Lyon County, known as the Gitchie Manitou Park, representing a type of topography and the Sioux quartzite, and typical prairie plants. Typical prairie plants and loess topography are represented in the Fremont County State Park. The Board had

hoped that some one would be generous enough to give to the state a large virgin strip or territory for a prairie park.

Many of the state parks have been dedicated. Of these mention may be made of Dolliver, Ledges, Backbone, Lacey-Keosauqua, Okamanpedan, Pine Creek, Merrick, Ambrose A. Call, Bellevue, Twin Lakes, and Eagle Lake State Park.

Quite early the Board recognized the importance of preserving for Iowa the meandered lakes and streams and so embodied in a bill drafted by Attorney General Gibson that all of the meandered lakes and streams should be created public parks. In this single act some seventy odd lakes were made a part of the state park system, as well as a number of meandered streams such as the Des Moines, Iowa, Nishnabotna, Wapsipinicon, and Upper Iowa rivers. It thus secured a large number of parks. It recognized the difficulty in connection with the ownership of the old meander survey of the lakes, but there never has been any contention that parts of streams once covered with water, and parts of lakes also, are not a part of the public state property and parks, as clearly indicated by the vegetation on the banks of lakes and streams and supported by several decisions of the District and Supreme courts of Iowa, as well as of the United States.

LACEY-KEOSAUQUA PARK

An item on the naming of the Lacey-Keosauqua Park may be of interest. E. R. Harlan gives the reason for it being so named, because Major John F. Lacey did so much for conservation. 305

In this connection attention may be called to a memorial volume on Major John F. Lacey³⁰⁶ by the writer, published by the Iowa Park and Forestry Association. This volume of 454 pages published in 1915 was dedicated to Mrs. Martha Newell Lacey. It contains many of the addresses of Major Lacey on the subject of conservation, especially the part he had to do in connection with the federal protection of migratory birds, and also his addresses concerning conservation in general. To commemorate Major Lacey, Lacey conservation days were held for several seasons in the Lacey-Keosauqua Park.

³⁰⁵ Ibid., Vol. XV, p. 466, 1926. 206 Rept. Ia. Park and Forestry Assoc., 1913.



One of the largest American elms in Ledges State Park, Boone County, nearly eight feet in diameter. Photographed by G. B. MacDonald,

NATURE HIKES

State parks have been used for nature hikes from the very beginning. Thus, for instance, the Ledges have been used for nearly forty years, long before the state park was established, and after the establishment of state parks several nature hikes have been held each year by members of the scientific staff of Iowa State College, the State University, Grinnell, Cornell, Iowa Wesleyan and Coe College. During the past season nature hikes were carried out more methodically in the Ledges State Park than heretofore. Each Sunday afternoon at 3 o'clock hikes were conducted by Carl Fitz Henning or myself. This year through the entire season counting the other hikes in addition to those on Sunday afternoon about twelve hikes were taken by myself. The afternoon nature hikes given under my direction were always preceded by a lecture on conservation, and much interest was manifested by the hearers.

Other nature hikes have been conducted in this park by T. C. Stephens of Morningside College, Sioux City, Prof. J. E. Guthrie, Department of Zoology at Ames, John Smith of the Geology Department at Ames, and W. M. Rosen. Geology hikes have also been made by Drs. Kay and Thomas of the geology department of the State University.

Nature hikes have been conducted in some of the other state parks by I. T. Bode and G. B. MacDonald. From the very beginning nature hikes were made in the Backbone Park in Delaware County. Several hikes were conducted during the session of the American School of Wild Life Protection.

Nature hikes were also conducted this year by the writer in the Dolliver Memorial Park, the Devil's Backbone Park in Madison County, the Pine Creek State Park, and several years ago in the Fremont County Park accompanied by LeRoy Titus Weeks, and in the Backbone Park in Delaware County accompanied by H. C. Overholser. Prof. B. Shimek has on several different occasions made nature hikes in different state parks, particularly in the Palisades State Park and the Jones County Park. Dr. H. S. Conard conducts nature hikes in Pine Creek State Park, Dr. S. W. Stookey in the Palisades and Jones County parks. Prof. H. E Jaques conducts hikes in the Lacey-Keo-

sauqua and Oakland Mills State Park. In the Jones County Park a trail was laid out by Miss Lillian Pearl Heathershaw of Drake University. A discussion of Indian mounds with hiking parties has been made by E. R. Harlan in the Lacey-Keosauqua Park, and also by Dr. C. R. Keyes of Cornell College in the Palisades State Park.

Miss Heathershaw made some nature trails in Jones County Park in 1927. In making nature trails the problem of plant life must be thoroughly studied.

THE IOWA STATE PARK SYSTEM 307

There is a background to every movement and so the movement for parks in Iowa had an interesting beginning. Away back in the fifties when Iowa was very young, one, Mr. T. S. Parvin, then register of lands, so Mr. Harlan discovered in looking through the Iowa Archives, advocated in one of his reports that the state of Iowa should buy a large tract of land in Des Moines to preserve the trees of the State House grounds because in time this woodland would be needed for recreational purposes. Certainly a prophetic vision.

In 1895 when I was a newcomer in Iowa, Dr. Thomas H. Macbride, then the professor of botany in the State University of Iowa, advocated county parks. He said, "County parks would tend to preserve to those who come after us, something of the primitive beauty of this part of the world, as such beauty stood revealed in its original flora. I esteem this from the standpoint of science, and indeed, from the standpoint of intellectual progress, a matter of extreme importance. Who can estimate the intellectual stimulus the world receives by the efforts made to appreciate and understand the varied wealth of nature's living forms."

Later there was organized the Iowa Park and Forestry Association at Ames, in 1901, for the very purpose of stimulating our interest in parks. Later the daughter of the association, The Iowa Conservation Association, with increasing momentum, did most active work in creating an interest in the matter of state parks. To the work of this association there should be added the great help of the Iowa Women's Federation in securing the necessary legislation for state parks.

Let us for a few minutes contemplate the pioneer of Iowa. I am reminded of the hardships of the pioneer as portrayed in a fine volume by Mrs. Florence Cowles, "Early Algona." I am always grateful to these pioneers for laying the foundations of a great commonwealth. These pioneers had their pleasures in the "great out-of-doors" and it made of these men and women a sturdy folk. "Those who have spent their lives in cities and have depended on sources outside themselves for their amusements and recreations may feel a sentimental throb of

³⁰⁷Radio address by L. H. Pammel, July 26, 1929, over WOI.

pity for this little group of settlers, miles from the bright lights and padded luxuries of civilization, but sympathy was the last thing asked for by these rugged nature-loving, adventurous pioneer men and women. Obstacles overcome gave flavor to their lives."

The first legislation looking towards the conservation of our lakes was when Senator Daniel Cady Chase of Webster City secured the passage of a law directing the State Highway Commission to make a survey of the lakes of Iowa. The commission made some very constructive suggestions. This report had the commendation of all friends interested in state parks. "A committee of the Iowa Conservation Association, the curator of the State Historical Department, assistant state geologist, the highway engineer and several prominent members of the House and Senate, among these Senator Byron W. Newberry and Senator B. J. Horchem (succeeding session of legislature, Senator Foskett, and Speaker of the House McFarlane) met with the chairman of the Senate Committee on Fish and Game, Senator Perry C. Holdoegel. He was selected to draft a bill to be presented to the Senate and House creating a system of state parks. The bill was duly presented and the Thirty-seventh General Assembly passed a conservation law. This law gave to the State Board of Conservation, the Fish and Game Department and the Executive Council the right to create state parks from fees received by the Fish and Game Department from the sale of hunters' licenses. The Thirty-eighth General Assembly amended this law by eliminating the support derived from the Fish and Game Department, making a direct appropriation of \$100,000 annually. The Executive Council at its discretion, however, was empowered to use funds for park purposes from the fish and game protection fund. It also gave the Board of Conservation charge of the lakes. Subsequently funds for highway construction in the parks were provided. The Thirty-ninth General Assembly made the State Board of Conservation custodian for park purposes of all of the meandered streams and lakes of Iowa, making it further possible for counties and individuals to advance the payment for park purposes, provided said lands are properly approved by the Board and Executive Council. It also created the Gitchie Manito Park in Lyon County. The law for the creation of state parks made the creation a joint action of the State Board of Conservation and the Executive Council. The Executive Council at first appointed the board, except the curator of the State Historical Department, who was the ex-officio member. The first board, appointed during Governor Harding's administration, consisted of Joseph Kelso of Bellevue, J. F. Ford of Fort Dodge and L. H. Pammel of Ames. This board was organized on December 27, 1918, by electing L. H. Pammel president, and E. R. Harlan secretary. Senator W. G. Haskell of Cedar Rapids and Mrs. C. H. McNider of Mason City later succeeded Messrs. Kelso and Ford. This Board elected the same officers as the previous Board. Other persons who have served or are serving on the State Board of

Conservation are Mrs. E. F. Armstrong, former Senator Byron W. Newberry, Mrs. Henry Frankel, Mrs. R. H. Volland, W. E. G. Saunders and J. G. Wyth. C. S. Niles served as chairman for a time. The present chairman is W. E. G. Saunders. E. R. Harlan and W. C. Merckens served as secretaries of the Board, and D. C. Mott and Sidney Bemis as assistant secretaries. The Board members now are appointed by the governor. The members of the Executive Council who have helped or are helping to administer the State Parks are as follows: Governors Harding, Kendall and Hammill, E. H. Hoyt, F. S. Shaw, W. C. Ramsay, W. J. Burbank, Ed M. Smith, Ray E. Johnson, J. W. Long, Mark Thornburg, J. C. McClune, and G. C. Haynes. This is a brief story of the law and how the Board and the Executive Council co-operate.

Why do we create parks? With most people they are for amusement, some want a dance pavilion, a merry-go-round, etc. Parks are for recreation. If the ordinary form of amusement is desired the public state park is not the place to get it. It may be a necessity in the city, but certainly not in the country park. There is more than recreation in a park, and the Iowa law seems to have met this issue squarely when the words, "historical, scientific and scenic" were used. The persons who framed the law had in mind the preservation of animals, rare plants, unique trees, some unique geological formations, the preservation of the Indian mounds, rare old buildings where Iowa history was made. These parks serve an important function for students in high schools and colleges who are invited to make use of the same, and are especially valuable for boy scouts, campfire girls and similar organizations. The framers of this law wished to show generations yet unborn what Iowa had in the way of prairie, valley, lake and river. It was felt that a part of this heritage left to us was not only for the present generation, but that its citizens of the future had a just claim on this heritage. God surely blessed Iowa with the most fertile soil on the face of the globe and he planted here the finest type of citizens who will leave their impression on the nation, so let us do our part to make them happy so long as they are a part of our state.

During the early period of the existence of the Board a survey was made of some of the areas suitable for state park purposes. This was published as a volume, *Iowa Parks*. There have also been issued park booklets descriptive of some of the parks, and park bulletin brochures.

The sentiment for state parks in Iowa is splendid. Many notable gifts have been made to the state by communities and citizens.

The members of the Board serve without pay and a wonderfully fine lot of work has been done and surely this is deserving of recognition by the people of Iowa.

As stated before, the Board was created during the administration of Governor Harding. He was very much interested as well as the subsequent governors, N. E. Kendall and John Hammill.

All actions of the Board must be approved by the Executive Council,

and the Executive Council has also shown unusual interest in state parks and they share the responsibility, and therefore due credit should be given to them.

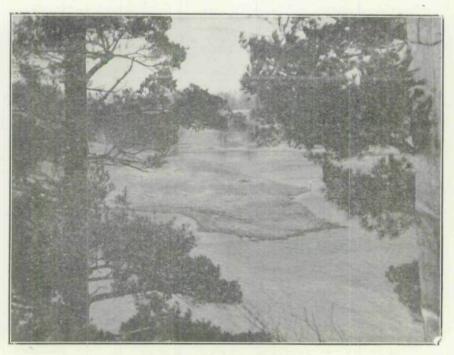
Again let me say that the State Board of Conservation was directed to acquire areas having one or more of three distinct qualities: historical, scientific, or scenic. These three fundamental things should always be borne in mind in connection with state parks. It is certainly absolutely important that this generation should pass on to the next some of the fine things we have inherited. This generation has no right to destroy that which was given to us, and therefore it seems to me that the scientific aspects are important. The Board, through its wise policies, has done a wonderful amount of good in furthering this side of conservation. When I recall the fact that in the Ledges State Park there are several large clumps of the large pink lady slipper which have been seen by thousands of people and yet not a single flower was picked, it proves to me that the Board has done a wonderful piece of constructive work along the lines of conservation. The people are beginning to appreciate the importance of conservation of our plant and animal life.

The state of Iowa has a number of outstanding parks. I do not have sufficient time to enter into detail concerning them. It would require several hours to describe every one of these parks separately. But I want to strike this keynote: that in our state parks we have some of the most unique areas in the United States. Let me refer to a few. The Ledges State Park, situated in central Iowa, is unique in not only the formation of rocks, the animal life, but for the rare species of plants. I refer to the island distribution of the reindeer lichen and the pale vetch, plants that are at home hundreds of miles from here.

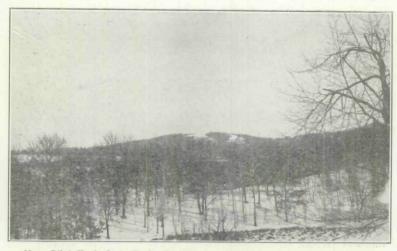
One of the other interesting parks of almost the same type of topography is the Dolliver Memorial Park. It has fine streams, springs and flowers. It is a most picturesque park.

Another outstanding park in this respect is the Pine Creek State Park near Eldora. A wonderful park it is, and in some respects, contains some of the most unique forms of plant life in the state and in the United States. Unfortunately a part of this is not in the park. I refer to the Falling Rock area. But please remember that the white pine, paper birch and wintergreen birch have found the limit of their southwest distribution in the United States at this point. Therefore this is a most remarkable spot and I hope that the public at large will ever bear in mind the importance of conservation in this park. The lake is valuable and interesting from the recreational standpoint, but we must never forget that these rare native plants have found here a last haven of rest in the United States.

Another interesting park is the Ambrose A. Call State Park near Algona which was dedicated in July, 1929. This park is interesting from a historical standpoint. Mrs. Cowles has told us much of the history of



Pine Creek State Park near Eldora.



Near Pilot Knob State Park. Bluffs covered with northern pin oak (Quercus ellipsoidalis), bass wood (Tilia americana), burr oak (Quercus macrocarpa) and slippery elm (Ulmus fulva).

this region and particularly where A. A. Call settled and she has done

it in a very delightful way.

Pilot Knob Park in Hancock County is worthy of mention here. This tract is valuable for several reasons. The plant life is not unlike that found in several other sections in northern Iowa. But here we have a typical island flora. It covers most of the tract except at the summit where we have a little open prairie. But remember that this is the highest point in direct line between the Ozarks and the source of the Mississippi. It is 1,500 feet above sea level and situated on one of the great glacial moraines of the country. The lake, generally known as Dead Man's Lake, is interesting. It contains fine water lilies and other aquatic plants. Ocheyedan Mound, much further west, is 1,670 feet high.

Another unique park is the Lacey-Keosauqua in southeastern Iowa. It contains more native species of oak than any other park or single area in Iowa. It is one of the larger of the state parks. The plant life here is to some extent southern, and the southern types of plants are more common than in the other areas which I have mentioned.

Another most interesting park is the Backbone Park in Delaware County. Here again we have an island expression. The white pine found on a ledge above the Maquoketa are interesting old trees that should remind one of the days when the Indians camped under their shadows. Here we also have other interesting plants, especially ferns.

Another interesting park is the Devil's Backbone Park in Madison County. Here again a narrow ledge, with a typical prairie flora is found, with some interesting trees, like the corky bark elm and in a fine oak grove close to the river, the quercitron oak, or black oak.

The Muscatine park, called Wildcat Den, is unique. This is interesting not only because of the most southern extension of the white pine west of the Mississippi River, which occur upon the sandstone ledges; some rare, interesting southern ferns have also found here a refuge. We owe it to the Brandt sisters who so generously donated part of this. park.

Another interesting park is Bixby Park in Clayton County. The Bellevue Park in Jackson County is a fine park upon a high bluff where one gets a wonderful view of the Mississippi River. This park combines especially the historical, scientific and recreational. Another park is Wapsipinicon near Anamosa with the rugged bluffs skirting the river and fine timbered tracts.

The Palisades, Linn County, is another beautiful park with palisade limestone rocks which form a gorge through which the Cedar River flows where are many white oak trees and many beautiful flowers.

The Guthrie County Park is also combined with the historical, scientific and recreational. It was through this park that the old road or trail to Council Bluffs goes which was used by the early pioneers.

Another interesting park is the Maquoketa Caves, with its natural

bridge. It is interesting because this fine natural bridge is just a little bit away from a fine prairie country.

Other interesting parks are the Flint Hills, near Burlington, which again combines the historical because it was here that the Indians secured their material for arrow heads. Oak Grove Park on the Big Sioux River is interesting not only from the standpoint of native wild flowers but the outlying tree growth, particularly the burr oak.

Fremont County Park is interesting from the standpoint of the historical associations. One gets a fine view of the valley from the bluffs of the Missouri loess. Redbud papaw and other interesting trees occur in this park.

The Lewis and Clark Park represents an entirely different type of park. Again the historical associations occur. On this lake Lewis and Clark landed on their memorable expedition up the Missouri. There are fine sand dunes and fine native trees and shrubs.

Attention may be called to the Fort Atkinson State Park. It was here in 1840 that the United States government erected a fort. Part of the original buildings are still standing. This park is located in Winneshiek County.

The lakes are important in connection with our recreation and conservation of water. Of these interesting lake parks attention may be called to the Lost Island Lake Park, Twin Lakes State Park, Clear Lake State Park, Eagle Lake State Park and Rice Lake State Park. It is the duty of the state to give the people this contact with the water where they can relax.

One of the very interesting unique parks in southern Iowa is the Farmington State Park which is the gift of the Farmington people. It has a wonderful American lotus bed.

The Elbert tract in Polk County represents a type of our streams that is wonderful. There are wonderful black walnut and sycamore trees and elm trees here.

A small and rather remarkable tract in the state is the Gitchie Manito Park in Lyon County. This was an important point for the Indians when they traveled northward from Iowa. The rocks consist of Sioux quartzite. In the middle of this is a pool of water. This is the only park in the state where buffalo grass occurs—also several other rare western plants.

Okamanpedan State Park is interesting from a historical standpoint because the name was recorded as used by the Indians, by an early French explorer, Nicollet.

There are many other areas which should be made into state parks—outstanding areas from a scientific standpoint. We trust that the legislature will be generous enough to provide in the near future sufficient funds so that such areas can be made into state parks. As one who is interested in science, and interested in the welfare of Iowa, I earnestly hope and pray that the state will do its part in the creation

and maintenance of state parks, because I believe that the state's future greatness will depend somewhat upon the amount of recreation and enjoyment we are going to give to the people. We must have a happy and contented people and we can aid in this by a park service.

PARKS AND PROPOSED PARK SURVEYS

Surveys of areas suitable for park purposes from scientific, recreational and historical features were made, and before an area was accepted for park purposes a scientific and recreational survey was made and presented to the Board. A report on such areas as Lake Manawa, Decorah cave, and Balsam firs growing on the Yellow and Oneota rivers.

The Pine Creek Hollow areas and many others were studied in detail. And finally, when the chairman retired, a two-volume manuscript exhaustive report was made. The synopsis of this was printed in the Park Bulletin, handsomely printed, describing the parks.

The volume, Iowa Parks, contained papers on Iowa lakes and lake areas by Lewis E. Ashbaugh, Leslie E. Francis, E. C. Hinshaw, Thomas H. Macbride, and L. H. Pammel. Articles on state parks and reserves were written by Frank H. Culley, C. F. Curtiss, Frederick J. Lazell, T. H. Macbride, G. B. MacDonald, G. C. Morbeck, L. H. Pammel, G Perle Wilson Schmidt, and Zellah M Schermerhorn. Papers on wild plants and bird life were written by B. H. Bailey, George Bennett, Mrs. E. A. Burgess, Charles F. Clarke, Henry S. Conard, R. I. Cratty, Harriette S. Kellogg, T. C. Stephens, J. A. Spurrell, and H. J. Taylor. Papers on conservation and parks were submitted by M. F. Arey, E. D. Ball, Frank H. Culley, C. F. Curtiss, Wesley Greene, Ada Hayden, B. J. Horchem, James H. Lees, Thomas H. Macbride, Mrs. Mary H. McNider, Ellison Orr, L. H. Pammel, R. J. Pearse, Elmer Reeves, B. Shimek, and T. R. Truax.

This volume of 328 pages is handsomely illustrated with pictures typical of Iowa scenery and wild life and is the most comprehensive report ever issued on some of the parks and proposed parks in the state. This was edited by E. R. Harlan, D. C. Mott, Alice Marple, and L. H. Pammel.

In the matter of making a continuation of the reports of the State Board of Conservation park bulletins in four volumes on

Iowa state parks were issued beginning in 1923 and continuing to June, 1927. These volumes contain a partial record of the actions of the State Board of Conservation and a final report of the chairman of the board, L. H. Pammel. 308 These publications contain many other interesting articles. Among them are the following:

"Touring Iowa with the Geologists," by James H. Lees; 309 report of the American School of Wild Life Protection; "Early Conservation," by L. H. Pammel; 311 report of the state-wide picnic at the Backbone Park, with addresses by C. H. True, Byron W. Newberry, L. H. Pammel, Governor John Hammill, W. E. Albert, and Clem F. Kimball; 312 dedication of the Pine Creek State Park with addresses by Albert R. Rice, W. H. Soper, L. H. Pammel, and L. V. Carter; 313 report of the sixth annual conference on state parks;314 report of the second Lacey conservation day;315 dedication of the Okamanpedan state park and marker;316 addresses by Mrs. W. G. Gordon, Mrs. E. F. Armstrong and L. H. Pammel;317 list of Iowa state parks and the state park law; 318 account of the Mississippi Valley Conference on the Value of Aquatic Resources, with accounts of Tuttle Lake, Lacey-Keosauqua, Backbone parks and an account of the white pine; 319 article on the burr oak; 320 "Some Birds that you may meet in the Ledges State Park," by Carl F. Henning; 321 "The Ledges State Park," by L. H. Pammel; 322 an article on our state parks by Mrs. Francis E. Whitley; 323 "Preservation of Water Areas Vital to Wild Life," by C. Avery; 324 article on the "Depletion of Aquatic Resources, the Cause and Remedial Measures," by C. F. Culler; 325 article on the "Passing of Outdoor

³⁰⁸Bul. Ia. State Parks, Vol. IV, Nos. 5 and 6, pp. 129-46.
309[bid., Vol. IV, p. 148.
319[bid., Vol. IV, p. 153.
311[bid., Vol. IV, p. 113.
312[bid., Vol. IV, No. 65.
313[bid., Vol. IV, p. 33.
314[bid., Vol. IV, p. 54.
315[bid., Vol. IV, p. 12.
316[bid., Vol. IV, p. 1.
318[bid., Vol. I, No. 1.
319[bid., Vol. I, No. 3, p. 11.
322[bid., Vol. I, No. 3, p. 11.
322[bid., Vol. I, No. 4, p. 15.
324[bid., Vol. I, No. 4, p. 15.
324[bid., Vol. I, No. 4, p. 12.
325[bid., Vol. I, No. 4, p. 9.

America," by Mrs. E. F. Armstrong; 326 article on "Trails," by H. E. Pammel, 327 showing the necessity of properly constructed trails through parks and the value of the same from the standpoint of a thorough appreciation of the park; article by John R. Fitzsimmons on the "Conservation School at Ames;" article on "Forests and Forestry," by L. H. Pammel; 329 minutes and notes on the National Conference of Outdoor Recreation; 330 "May Days at the Upper Palisades of the Cedar," by Gertrude M. Cole;331 "Some Spring Days in our Iowa State Parks," by L. H. Pammel; 332 "A Discussion of a Place for Plants on the Right-of-ways of Railroads," by G. B. MacDonald; 333 "The Prairie,"334 and "Parks and Parks," by T. H. Macbride; 335 dedication of the Ledges State Park with addresses, by M. V. Higbee, L. H. Pammel, and W. C. Ramsay; 336 dedication of Pilot Knob State Park with addresses by L. H. Pammel, Byron W. Newberry, W. E. G. Saunders and a poem by Eugene Secor; 337 dedication of the Clinton Merrick Park with addresses by L. H. Pammel, W. C. Merckens, and L. R. Hall; "Recreational Survey of the Lacey-Keosauqua Park," by H. E. Pammel; 339 "Prairie Parks," by L. H. Pammel; 340 dedication of the Dolliver Memorial Park with addresses by L. H. Pammel, J. B. Weaver, J. C. McClune, W. H. Welch, J. J. Share, and John Ford, M. E. Olsen presiding; unveiling memorial by Miss Frances Pearson Dolliver;341 "Study and Selection of Sites for State Parks," by James L. Greenleaf; 342 list of Iowa State Parks-thirty-eight in number;343 Raymond Torrey on the "State Parks of Iowa;"344 Lacey conservation day at Keosauqua345 (this was the first Lacey conservation day held); conservation program at the

^{\$26\}lind\$, Vol. I, No. 4, p. 6.
\$27\lind\$loid., Vol. II, No. 6.
\$28\lind\$loid., Vol. II, p. 9.
\$29\lind\$loid., Vol. II, p. 9.
\$29\lind\$loid., Vol. II, p. 1.
\$30\lind\$loid., Vol. II, p. 24.
\$32\lind\$loid., Vol. II, p. 19.
\$33\lind\$loid., Vol. II, p. 19.
\$33\lind\$loid., Vol. II, p. 19.
\$33\lind\$loid., Vol. II, No. 5, p. 15.
\$33\lind\$loid., Vol. II, No. 5, p. 14.
\$37\lind\$loid., Vol. II, No. 5, p. 14.
\$37\lind\$loid., Vol. II, No. 5, p. 3.
\$39\lind\$loid., Vol. II, No. 5, p. 3.
\$39\lind\$loid., Vol. II, p. 6.
\$34\lind\$loid., Vol. III, p. 9.
\$34\lind\$loid., Vol. III, p. 25.
\$34\lind\$loid., Vol. III, p. 44.
\$34\lind\$loid., Vol. III, p. 44.
\$34\lind\$loid., Vol. III, p. 44.

State University;346 report on the state park for Burlington, by L. H. Pammel:347 state park addresses by L. H. Pammel at the School of Wild Life Protection, August 8-20, 1925;348 "National Wild Life Refuge, Established on the Upper Mississippi," by L. H. Pammel;349 "Conservation in the State Parks," by L. H. Pammel;350 address delivered to the annual conference of the Isaac Walton League, at Ames;351 "The Indian as a Conservationist," by L. H. Pammel, being an account of a statement made by M. R. Gilmore on the Indian and conservation; 352 an address on "Memorial Parks," by C. H. Diggs; 353 a detailed report of the Ledges State Park by J. R. Fitzsimmons; 354 "Our Lakes and State Parks," by L. H. Pammel, with many notes on state parks;355 detailed report on Pilot Knob State Park by John R. Fitzsimmons, accompanied by a map; 356 a discussion of the season of 1925 by L. H. Pammel;357 a discussion of the State Board of Conservation becoming custodian of unusual trees; 358 an interesting article on "The Economic Value of Birds from an Agricultural Standpoint," by John L. Cole; 359 American School of Wild Life Protection; 360 "The Need of Forestry Vital," by A. J. Secor; 361 "An Account of Dvorak," by Mrs. Louis B. Schmidt; 362 "Iowa Conservation Association," by C. H. Diggs; 363 "Some Notable Boulders and Ice Caves," by L. H. Pammel; 364 and a discussion of certain areas not acquired but very choice. These areas are Pine Hollow in Dubuque County, McGregor, Juniper area in Floyd County, Red Rock, and Cedar Bluff on the Des Moines River, the Middle Coon in Guthrie County. Favette, and West Union. 365

³⁴eIbid., Vol. III, p. 43.
347Ibid., Vol. III, p. 37.
348Ibid., Vol. III, p. 33.
349Ibid., Vol. III, p. 33.
349Ibid., Vol. III, p. 91.
350Ibid., Vol. III, p. 88.
351Ibid., Vol. III, p. 71.
353Ibid., Vol. III, p. 65.
354Ibid., Vol. III, p. 65.
354Ibid., Vol. III, p. 65.
354Ibid., Vol. III, p. 170.
356Ibid., Vol. III, p. 170.
356Ibid., Vol. III, p. 166.
358Ibid., Vol. III, p. 168.
359Ibid., Vol. III, p. 152.
300Ibid., Vol. III, p. 148.
361Ibid., Vol. III, p. 144.
363Ibid., Vol. III, p. 143.
364Ibid., Vol. III, p. 144.
365Ibid., Vol. III, p. 144.

Many of the numbers contained notes on parks which will be of use to students in connection with park work.

The State Board of Conservation also issued four park booklets as follows: No. 1—Ledges State Park; No. 2—Dolliver Memorial State Park; No. 3-Eldora Pine Creek State Park; No. 4—Pilot Knob State Park. The Pilot Knob booklet also includes Merrick, Eagle Lake, Rice Lake and Crystal, East and West Twin and Duck lakes. In these are accounts of the early history of the region, the plant and animal life, the geology and other matters of local interest in connection with park work. The contributors to the Pilot Knob State Park booklet are L. H. Pammel, Eugene Secor, and the geology by James H. Lees. Dead Man's Lake has an old Indian story behind it, by W. R. Pruitt. The contributors to the Eldora, Pine Creek State Park booklet are L. H. Pammel, and Charles L. Hays on the Iowa valley history. The Dolliver Memorial contributors are James H. Lees, Sarah Hoke, C. M. King, L. H. Pammel, Carl F. Henning, B. Shimek and Ada Hayden. The contributors to the Ledges Park booklet are John E. Smith, J. E. Guthrie and L. H. Pammel. This is the second edition, and is dedicated to Carl F. Henning. These park booklets are all handsomely illustrated.

THE NATIONAL CONFERENCE ON STATE PARKS, THE OUTGROWTH
OF THE ACTIVITIES OF THE IOWA STATE BOARD
OF CONSERVATION

Stephen T. Mather, who was director of the National Park Service, was so impressed with the progress made by the Iowa State Board of Conservation that in conference with E. R. Harlan and L. H. Pammel he asked that a national conference on state parks be held in Des Moines, Iowa, January 9 to 12, 1921. A large part of the work in connection with this conference was carried out under the direct efforts of E. R. Harlan and O. Van Wyk, Jr.

The conference was called to order by E. R. Harlan.

George Bennett in speaking of this conference stated, "The conference was called to order by Mr. E. R. Harlan, the genial and versatile secretary of the Iowa State Board of Conservation, who was the mentor and guide for the assembly for three full prolific days."

Governor W. L. Harding stated that it afforded him very great pleasure to be accorded the privilege and honor of having some little part in assembling on that occasion the body of men and women before him.

Stephen T. Mather in an address stated, 366 "It is certainly a pleasure to be here in Iowa, a state that has made such a splendid start in the state park development. Coming as I do from the national capital, I bring you the greetings of the secretary of the interior, Hon. John Barton Payne, who, as you know, has supreme jurisdiction over the national park system, is my chief, and it was he who suggested that this conference be held in this state. While I have long been interested in park work in cities and during the last six years in national park improvement, it was not until two years ago that I came to fully realize the great importance of state parks, and that realization has caused me to give much attention to the state problem in various sections of the United States.

"The Iowa state parks have already been described to you by Dr. Pammel and I cannot add more. Suffice it to say that the Iowa state park survey has won the admiration of the country and that the work of the Board of Conservation of which Dr. Pammel is chairman, and E. R. Harlan secretary, offers an example to all non-partisan boards who want to accomplish real things."

Barton Payne was elected chairman, Stephen T. Mather, vice chairman, and Beatrice M. Ward, secretary of the conference.³⁶⁷

A complete account of the convention was given by the Rev. George Bennett.³⁶⁸

Delegates attended this conference from California, Colorado, Connecticut, Illinois, Indiana, Iowa, Kansas, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New York, North Dakota, Ohio, Oregon, Pennsylvania, Vermont, Virginia, Washington, Washington, D. C., Wisconsin and Wyoming.³⁰⁹

³⁶⁶¹a. Conservationist, Vol. 5, p. 10. 2671a. Park Bul., Vol. I, No. 1, p. 5. 3681a. Conservationist, Vol. V, p. 14. 3691bid., Vol. V, p. 15.

T. P. CHRISTENSEN'S PAPER ON STATE PARKS

The subject of state parks and to a limited extent, conservation, was reviewed by Dr. T. P. Christensen³⁷⁰ quite recently. There is an adequate presentation, although the facts pertained only to the different state parks created up to the time that the paper was written. The papers contains reviews of matters pertaining to state parks and conservation. There is also a review of the earlier work on the subject in the state and this definition of conservation taken from Taylor's "Conservation of Life through City Parks" in *Transactions Iowa Horticultural Society*, 1918.

"The term 'conservation' as used today is of recent origin. It was scarcely known before 1907. But it has since become a national slogan, the symbol of a great and growing national movement for the conservation of not only forests and scenery but also water power, all forms of wild life, and human life as well." He traces the matter of conservation back through the Colonial period when New Hampshire passed legislation to protect her forests and when William Penn decreed the setting aside of wood lots. The national policy of conservation began in 1817 when Congress authorized the secretary of the navy to reserve certain lands producing live oak and red cedar for the purpose of supplying the navy. Then he discusses the timberland act of the government and the forestry act of 1891.

The real beginning of the creation of state and national parks was started then, although the Yellowstone and Hot Springs, Arkansas, national parks were started long before that—the former in 1872 and the latter in 1832. Dr. Christensen refers to the work of Major John F. Lacey and President Roosevelt, and the book of John Muir published in 1901, Our National Parks. And it also mentions the work of Gifford Pinchot in 1910, The Fight for Conservation. Altogether this is a most valuable paper.

T. P. Christensen, in his paper, made use of much of the material published in the Iowa park bulletins, including the dedication exercises. The Christensen paper also contains many other historical references. For instance, under the head of

³⁷⁰Ia. Jour, of Hist, and Politics, Iowa City, Vol. XXVI, pp. 33, 414, 1928,

"Lakes" reference is made to the surveyor Nicollet and other historic figures and facts. The same applies to historical material in connection with such parks as the Lepley State Park, in which mention is made of the story of the Lepleys, and in Pilot Knob State Park there is an account by Prewitt, who gave an account of the legend connected with Dead Man's Lake in that park.

AMERICAN SCHOOL OF WILD LIFE PROTECTION 371

I am to speak to you this afternoon on the subject of The American School of Wild Life Protection. There is always something interesting back of every movement.

The real beginning of the movement for the establishment of a School for Wild Life Protection was in December, 1901, when the Iowa Park and Forestry Association was organized with Thomas H. Macbride as president, and L. H. Pammel as secretary. Prominent other members at this meeting were A. T. Erwin, J. L. Budd and Cyrus Mosier.

This society later was merged into the Iowa Conservation Association. Among the earlier workers were G. B. MacDonald, H. S. Conard, Fred J. Lazell, Ervin E. Reed, Mr. and Mrs. A. Chapin and Misses Chapin. These people have taken a very prominent part in the association.

The people of McGregor and vicinity have long been interested in conservation, and the building up of an organization which would attract people to this vicinity. The Reverend George Bennett, field representative of the Iowa Conservation Association in 1918, wrote as follows: "Notwithstanding the jewel possessed by the state of Iowa in its northeastern section, in the form of entrancing scenery and the setting of still entrancing scenery, it would seem that few of our dwellers in the state are aware of it. And if the residents of Iowa herself are unknowing and unaware, where may the rest of the country be expected to come in? It was therefore both wisdom and policy that on a recent date, an exploring party should set out to investigate an area of which inviting and pleasing reports had come, and it is with the movements of this distinctive party that this recital has to do. It is a story founded on data demonstrating that those in the quest were delighted with every phase and experience of their enquiry and search, while, on the part of those who acted as hosts to the visitors, there is de facto evidence that the former found their guests so responsive and loyal to their new environment, it made the work of entertaining one appealing and continued pleasure.

"The explorers to whom allusion has been made, embraced a company known as the Iowa Conservation Association. A prominent worker in

³⁷¹Radio address by L. H. Pammel, July 5, 1929,

its ranks, and a veteran of its order, Dr. L. H. Pammel of Ames, had made a preliminary visit to the section, and in his capacity as acting secretary formulated plans with the residents of McGregor, North McGregor and district, relative to what it was desired to accomplish. And the maturing of the dates which had been selected, resulted in the bringing off of a program of very definite interest and enjoyment. Various circumstances intervened to modify the details of this, but such did not affect the movement and spirit characterizing the hours of genuine pleasure making up the record days."

At this meeting of the Conservation Association there were President Euclid Saunders of Iowa City, Mrs. C. H. McNider of Mason



Ulmus americana and native hackberry (Celtis occidentalis) in a bog in Story County.

City, Mrs. Francis E. Whitley, state chairman of the Fourth District Woman's Committee of the National Council of Defense, Dr. George F. Kay, state geologist, and some of the leading citizens of McGregor interested in the project. M. X. Geske, W. H. C. Elwell, Mrs. Barry Gilbert, F. G. Bell, Miss Althea R. Sherman, Dr. C. Seashore, E. R. Harlan, Mr. Daubenburger, Carl D. Bickel, and Miss Frances Clark, were among those present at the meeting. This probably was the beginning of the sentiment to start this conservation school.

A second interesting meeting was held beginning July 27, 1929, of the Conservation Association, at which addresses were made by Dr. George F. Kay, Father Horsefield, Willis F. Bickel, Rev. A. E. Cutler, Dr. B. Shimek, Miss Florence Chapin, S. W. Beyer, J. H. Lees, T. C. Stephens, R. T. St. John, L. D. Dennis, John Boyle, J. M. Berry, Miss Florence L. Clark, E. R. Harlan, W. E. Albert, I. T. Bode, and L. H. Pammel.

Visitors on the program from outside of Iowa were: Dr. A. R. Whitson and W. E. Barber, both of Madison, Wisconsin; H. C. Cowles, Chicago; and Jens Jensen, Ravinia, Illinois.

Senator Byron W. Newberry also was there. He came on my invitation because he had become very much interested in conservation.

Such subjects as the following were presented during the week:

Geology—Dr. George F. Kay, State Geologist.

Botany—Dr. L. H. Pammel, Iowa State College.

Dendrology—Dr. B. Shimek, Iowa State University.

Ornithology—Dr. T. C. Stephens, Morningside College.

Iowa Indian Lore—Prof. Charles R. Keyes, Cornell College.

Rev. George Bennett said: "The recent gathering of the allied conservation forces of the state at McGregor was the natural outcome of the two summer sessions that had preceded it, and such a coming together at a period of the year when discussion of themes of educational moment and matters of business import can be so wisely and agreeably co-ordinated, certainly calls for the establishment of the summer assembly as a fixed and permanent place in the minds of our friends, and from year to year may be expected to demonstrate both in numbers and interest an ever extending ratio of increase."

This, then, is the beginning of the idea of the Wild Life School. The statement was made in the July and September, 1919, No. 3, Iowa Conservation Magazine: "This initial school was assembled through the enterprise of the McGregor Heights Outing Association and five well known professors from the college halls of Iowa, who heartily responded to the invitation of the association where the principals on either side shouldered the impact, while the students reaped a harvest of acquired knowledge in the fruitful fields about them, without trouble of discussion of grades secured in the past or deposit of matriculation or tuition fees,"

Mr. Bennett stated in a paper in the Iowa Conservation Magazine, Volume IV, No. 3, page 71: "In the month of July, 1918, the Iowa Conservation Association held its second summer convention at McGregor, the three days' experience being replete with inspiration and interest. The following July witnessed the repetition of the Association's summer program at McGregor, the experience of the previous year having indicated that this was the logical course to pursue. The carrying out of the second year's program set forth the fact that the convention movement had been considerably enlarged and strengthened, and among other things, a feature introduced bearing the designation, 'The School of Wild Life Protection and Propagation.' The concluding half of the five days' session was devoted to this, the results being most satisfactory and gratifying."

One of the important events was the meeting of those interested in the aquatic resources of the Missisippi Valley, which was attended by Governor Harding, and representatives from Illinois, Wisconsin, Minnesota and Iowa. Among the Illinois representatives was Dr. S. A. Forbes. Minnesota was represented by the fish and game warden. This conference had much to do in starting the legislation concerning the Upper Wild Life Refuge. This conference was called at the suggestion of L. H. Pammel of Ames.

The man who had much to do with the School of Wild Life Protection was the Reverend George Bennett, Congregational clergyman, who lived at Iowa City. As stated before, the school was organized by Mr. Bennett in 1918. The original faculty consisted of Dr. George F. Kay, L. H. Pammel, Dr. B. Shimek, Dr. Leroy Titus Weeks, George Bennett, and Dr. Harry C. Oberholser.

Reverend Bennett was born in Cornwall, England, and died at the age of seventy-six, August 16, 1928, during the session of the school. The writer made this statement in a sketch of Mr. Bennett's life: "We of the American School of Wild Life Protection will miss the earnestness of the man, his devotion to duty. I know on the morning of his death we missed the familiar school bell which he invariably rang before the opening of the morning and evening sessions. Everyone admired the unselfish devotion of the man and his simplicity and straightforwardness. The last act of his earthly career was closed by presiding at the evening session of the American School of Wild Life Protection, August 15, 1928."

The faculty, the citizens of McGregor and the students of the school loved the man for his sincerity, and many expressions have been published in the daily press written by Miss Florence L. Clark and others. The North Iowa Times pays this fine tribute to him: "Dr. Bennett was loved in McGregor for the things he had done for McGregor. His vision brought about the establishment of a school to study wild life, the outdoors. His energy kept the school a live force. His interest in this section of the state had much to do with it being given govern-

ment recognition in the form of an act making it a national fish and game preserve."

Dr. W. T. Hornaday, the well known sponsor of game protection in this country, paid this fine tribute to the school: "I salute you and your collegiate colleagues on having started the first school of wild life protection and propagation ever started anywhere on this round earth, so far as I am aware. I wish for the founders of this school all the success and permanent satisfaction that your enterprise so fully deserves. I think that the fine example you are now setting, eventually will be followed in many other localities, both within and without the United States. I feel greatly honored by your invitation to become one of the endorsers of your very laudable enterprise."

And Dr. Hornaday's prophecy has come true. Other institutions and states have followed Iowa's example. There are now schools of like character in the universities of Michigan, Minnesota, New Mexico, Oklahoma, California, Colorado, and elsewhere. The seed which started at McGregor has spread to different sections of the country. The thought of Wild Life Protection is so entrenched in the minds of people in this state that the impetus was carried to all parts of the United States.

For the year 1929 the school opened on August 5, and closed on the 17th.

The subjects handled and the faculty members were:

Geology—Dr. Geo. F. Kay, University of Iowa; Dr. Stookey of Coe College; Dr. A. O. Thomas, University of Iowa.

Botany—Dr. L. H. Pammel, Iowa State College; Dr. Shimek, State University of Iowa.

Archaeology-Dr. Charles R. Keyes, Cornell College.

American Indians—Dr. Melvin R. Gilmore, Museum of the American Indian, New York City.

Forestry—Prof. G. B. MacDonald, Iowa State College; Prof. I. T. Bode, Extension Forester, Iowa State College.

Zoology-Dr. J. E. Guthrie, Iowa State College.

History-Captain W. A. Blair, Davenport.

Conservation—Mrs. Francis E. Whitley, chairman Committee on Forestry and Natural Scenery, General Federation of Women's Clubs, Webster City; L. H. Pammel, B. Shimek, and G. B. MacDonald.

Birds—Dr. Clyde Ehinger, Keokuk; Orphus M. Shantz, president Illinois Audubon Society.

Special Speakers—Mrs. Henry Frankel, Des Moines; C. F. Culler and Harry L. Canfield, U. S. Fisheries Bureau; W. F. Dickens, U. S. Dept. of Interior; Prof. Homer R. Dill, Director University Museum, Iowa City; Maj. R. C. Williams, Dist. Engineer, U. S. War Dept.; Capt. W. F. Bickel, Applied Conservation, McGregor, Iowa.

Special emphasis is put on field trips conducted by people who know plant life, the animal life and the geology of the country. Probably

this is true, that no better faculty representing the great out-of-doors conducts a school than the one at McGregor, Iowa.

The School of Wild Life Protection is sponsored by the people of McGregor, the Iowa Conservation Association, and the Permanent Wild Life Protection Fund, of which Dr. W. T. Hornaday is chairman.

The Iowa State Board of Conservation consists of W. E. G. Saunders, chairman, Emmetsburg; Mrs. Henry Frankel, Des Moines; J. G. Wyth, Cedar Falls; Byron W. Newberry, Strawberry Point; Mrs. R. H. Volland, Iowa City; and W. C. Merckens, and S. E. Bemis, secretaries of the Board.

The program printed gave the topics discussed by members of the faculty as follows:

On the first afternoon, August 5, a general field trip was taken. There were field trips held on August 5, 6, 7, 8, 9, 10, 12, and 14. On the last day of the school a steamboat excursion with a talk on piloting on the Mississippi by Captain W. A. Blair was enjoyed by the students and faculty.

On August 11 memorial services for Reverend George Bennett were conducted by L. H. Pammel.

The school was well attended this year and the work was greatly appreciated by the students. Senator C. J. Fulton, in the Fairfield Daily Ledger of September 11 writes: "The Wild Life School at McGregor is a unique institution. It is unique in that those that enroll are of all ages. It is unique in that its instructors are college and university professors—scientists who serve without compensation for the pure joy of teaching. It is unique also in its methods. It has a two-fold purpose—the study and conservation of wild life."

The State Board of Conservation, held a meeting at McGregor during the session of the school and contributed to the school to the amount of \$250. The members of the Board, therefore, were elected as honorary life members of the School of Wild Life Protection.

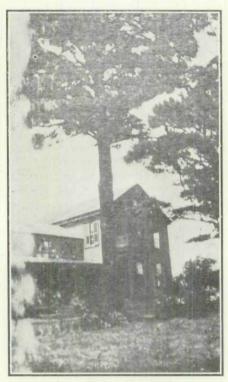
The good work of the State Board of Conservation continues to develop and it brings some very fruitful results, as is shown by the above statement. The work is to be highly commended and it is a fine gratuitous service that the members of the Board are rendering to the state.

The Iowa Conservation Association met with the school on August 6 and had a splendid program.

A notable historical conference celebrating the one hundredth anniversary of the signing of a peace treaty with the Indians was held in August, 1925. Mr. E. R. Harlan was present and contributed much to the success of this event, speaking on "Descendants of Some Iowa Aborigines." He brought some of the Tama Indians with him.

But this historical sketch is not complete without more details from Florence L. Clark as published in the *Christian Science Monitor* for 1925.

"'In Chicago in 1833, September 26 and 27, my people signed a treaty giving our lands east of the Mississippi in trade for 5,000,000 acres of Iowa lands. The white chiefs say they give



White pine tree set out by James H. Bonnell in May, 1855, in front of their house in Iowa City. It now measures nine feet in circumference eighteen inches from the ground.

us a free ride by boat and wagon to new place. Today I come to Iowa, but I pay full price for each mile on the fire wagon.'

"So said Chief Simon Kahquados of the Pottawattamie Indians in speaking of his long journey by rail from northern Wisconsin to the Wild Life School at McGregor, Iowa, to participate in the centenary celebration of the Indian peace treaty signed at Prairie du Chien in 1825. He laughed as he made the remark in his desire to show that he bore the whites of today 'no ill will.'

"Because their forefather chiefs were signers of the celebrated treaty of 1825, Chief Simon Kahquados and Sub-chief Mitchell of the Pottawattamies and Wampum, a Chippewa chief, came to take part in the Centenary pageant, staged at McGregor in commemoration of the great conference held between the white chiefs and red chiefs at Prairie du Chien 100 years ago. The Iowa Heights where this pageant took place overlook the Wisconsin prairie where thousands of Pottawattamies, Chippewas, Monominees, Ioways, and Sacs and Foxes assembled in that long ago day to establish boundaries which would stop the warring of the tribes among themselves.

"In full regalia the chiefs took dignified part in that day's doings, bearing themselves with the pride of race and authority as their grandfathers doubtless had in many ceremonies in those 600 years previous to the advent of white men, when the Pottawattamies dominated all the eastern Wisconsin, northeast Illinois, northern Indiana, part of Ohio and southern Michigan. They were leaders in that time in the fur trade traffic on Lake Michigan, gave the lake its name, attached their name to most of the rivers tributary to it, and more than fifty towns and cities and states. Their traditions gave Longfellow the material for Hiawatha.

"The remnant of the once powerful northern tribe of Pottawattamies now lives near Lake Michigan at Blackwell, Wisconsin, and it is here that the venerable chief Kahquados holds sway over the few of the chosen people as did his grandfather, Chief Quitos, over the many 100 years ago.

"Besides these chiefs about thirty Winnebagoes from the Dells of Wisconsin and villages near Lansing took part in the pageant. The pageant was directed by Mari Ruef Hofer, Chicago, who had directed many similar pageants, and is the author of books on music which are used widely in public schools of the United States.

"Characters were taken by Indians, McGregor men, and students of the Wild Life School. Bruce E. Mahan assisted Miss

Hofer and took a prominent speaking part. Charles E. Brown, curator of the Historical Museum, Wisconsin, and Miss Kellogg of the Wisconsin Historical Society were present."

In concluding this statement I want to make a brief reference to two men who were connected with the school. One of them is Dr. LeRoy Titus Weeks, clergyman of the Episcopal church, who, with rare ability and fine sentiment, helped so much in the school.

Then I have mentioned the passing of Reverend George Bennett, Congregational minister.

Also, I should like to mention Mr. Dilg, the founder of the Isaac Walton League, who did great work with reference to the Wild Life Refuge.

It seemed to me worth while to bring such movements as Arbor Day, forestry conservation, state parks, protection of birds and other animal life, and American School of Wild Life Protection under one head, as they are all allied and make a part of the conservation movement of today.

I am especially indebted to D. C. Mott for his editorial criticisms, and to E. R. Harlan for opening up the pages of the Annals of Iowa to me, and to Mrs. Lena Wilson for copying the manuscript.

RIVER RISING

The Des Moines River has been taking a little swell on itself within the past few days. Some folks here have been anticipating a small flood this spring, but we trust their anticipations will be disappointed. Enough water is needed to make the river navigable. The sight of a steamboat at our wharf from the lower country would be refreshing.—Daily State Register, Des Moines, March 3, 1864. (In the Newspaper Division of the Historical, Memorial and Art Department of Iowa.)

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