THE RECOLLECTIONS OF AN ECOLOGIST ON THE ORIGINS OF THE NATURAL RESOURCES COUNCIL OF AMERICA

> An interview with Alfred C. Redfield Conducted by Elwood R. Maunder

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INTRODUCTION

How can anyone fail to be curious about a place on the map which is identified as Woods Hole, Massachusetts? The name projects an aura of mystery even if it is not immediately associated with the great Marine Biological Research Station and Oceanographic Institution headquartered there. For more pedestrian name-fixers, Woods Hole reinforces awe of sturdy Puritans who so labeled their place of residence and whose successors have carried it off with dignity.

The outlander must repair to authorities on the origin of place names such as Woods Hole to understand its meaning to the local citizenry. There are a number of towns and villages on the Massachusetts coast which bear the name of some early citizen attached to the word hole. It is believed that originally the word was holl, being of either Scandinavian or Dutch origin and meaning an opening between islands or a strait between an island and the mainland as is the case at Woods Hole. When Joseph S. Fay was successful in bringing a railroad to the village, he had the name changed to Woods Holl in an endeavor to give the community what he felt was a larger dignity of name. But the local citizenry rejected the idea and it was not perpetuated.

The summer people who thread their way southwestward out of Falmouth for the most part hesitate in Woods Hole only long enough to catch the ferry steamers plying between the mainland and the quaint and fashionable islands, Nantucket and Dukes (better known as Martha's Vineyard). Few probably recognize the names of scientists given to the streets of the village, and local residents seem little occupied with trading upon their history to build more tourist tonnage. There are few markers or monuments. One could pass Maury Lane and never know what bright threads of American history have been spun along its short span of but a few hundred yards. It is of some of these threads that we speak in the oral history interview which follows.

Alfred Clarence Redfield and his wife of more than fifty-two years, Martha Putnam Redfield, live at the top of Maury Lane in one of those fine wooden houses that seem to go on forever and which are as comfortable as old shoes. Dr. A. C. Redfield is widely known in the scientific community for his work as a limnologist and oceanographer. He was the first elected chairman of the Natural Resources Council of America in 1946 when he was also president of the Ecological Society of America. The major part of this interview treats of the origins of the NRCA as they are recalled from Dr. Redfield's memory. The interview was jointly sponsored in 1973 by the Natural Resources Council of America and the Forest History Society and is now brought to print.

This is the second in a series of tape-recorded interviews with leaders of the conservation movement currently being made under the auspices of the Forest History Society and other member organizations of the Natural Resources Council of America. The first volume was issued earlier this year under the title <u>Clinton R. Gutermuth: Pioneer Conservationist and the</u> <u>Natural Resources Council of America</u>. A third volume is in process and records the personal history of Lieutenant General Milton A. Reckord, for many years on the governing body of the National Rifle Association of America and retired Adjutant General of the State of Maryland. It is our purpose that other similar interviews be made with the aid of other sponsors and that from this series a book of readings in conservation history will be drawn and published for reference use in high schools and schools of higher education.

Conservation history has only recently come into serious recognition within the mainstream of history research and writing. Widespread public interest in the subject is spurred by the many publications issued by conservation associations, societies, councils, committees, institutes and federations. New concern for the quality of the environment is aroused and it is desirable that serious studies be made of the history of this phenomenon and that the sources which reveal the conservation movement be recovered as swiftly as possible for preservation and use in archives and libraries.

The reader is warned not to look for polished prose in volumes of oral history such as this. This is the transcript of a series of conversations between Dr. Redfield and the interviewer made on June 30 and July 1, 1973 in the Redfield home. All tapes made in the interview are preserved in unexpurgated form by the Forest History Society at Santa Cruz, California. Typewritten transcripts of the tapes were made by the interviewer's wife, Eleanor L. Maunder. Research in preparation for the interviews was conducted by the interviewer and Dr. Susan R. Schrepfer of the Regional Oral History Office of the Bancroft Library, University of California at Berkeley. Barbara D. Holman assisted the correspondents in editing the final copy of the manuscript, prepared its index, and arranged all details of illustration and final publication in this form. The work will be reproduced in microfiche form to permit low-cost distribution to libraries and individual purchasers when funds for this purpose are made available. All uses of this work are covered by a legal agreement between the Directors of the Forest History Society and Alfred C. Redfield. The work is thereby made available for research purposes. All literary rights in the manuscript, including the right to publish are reserved to the co-authors of this work during their lifetimes and to the Forest History Society thereafter. No part of the work may be quoted for publication without the written permission of the Executive Director of the Forest History Society.

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Elwood R. Maunder

Santa Cruz, California June 4, 1974

Elwood Rondeau Maunder was born April 11, 1917 in Bottineau, North Dakota. * University of Minnesota, B.A. 1939; Washington University at St. Louis, M.A. (modern European history) 1947; London School of Economics and Political Science, 1948. He was a reporter and feature writer for Minneapolis newspapers, 1939-41, then served as a combat correspondent in the Coast Guard during World War II, and did public relations work for the Methodist Church, 1948-52. Since 1952 he has been secretary and executive director of the Forest History Society, Inc., with headquarters in Santa Cruz, California, and since 1957 editor of the quarterly Journal of Forest <u>History</u>. From 1964 to 1969, he was curator of forest history at Yale University Library. Under his leadership, the Forest History Society has been internationally effective in stimulating scholarly research and writing in the annals of forestry and natural resource conservation generally; 46 repositories and archival centers have been established in the United States and Canada

^{*}This biography was adapted from, Henry Clepper, ed., <u>Leaders of</u> American Conservation (New York: The Ronald Press Company, 1971).

at universities and libraries for collecting and preserving of documents relating to forest history. As a writer and editor he has made significant contributions to this hitherto neglected aspect of history, and in recognition of his services the Society of American Foresters elected him an honorary member in 1968. He is a charter member of the international Oral History Association of which he was one of the founders. He is also a member of the Agricultural History Society, the American Academy of Political and Social Science, the American Historical Association, the Organization of American Historians, the Society of American Archivists, and the American Forestry Association.



Dr. Alfred C. Redfield, ca. 1950

FAMILY BACKGROUND

- Elwood R. Maunder: Dr. Redfield, this is to be an interview that focuses primarily upon the origins of the Natural Resources Council of America, but before we get into that subject I would like to have just a brief summary of your own personal history. Perhaps I can capsulize it from the research done prior to this meeting: Your full name is Alfred C. Redfield and you were born in Philadelphia, Pennsylvania, November 15, 1890. You were married in 1922 and your wife's maiden name is Martha Putnam.
- Alfred C. Redfield: I was previously married in 1914 to Elizabeth Sewell Pratt, who died in 1920.
- ERM: Could you tell us a little about your marriage to Martha, her part in your life, and her painting interest? You've been married for fifty years or more?
- ACR: Very close to fifty very happy years.
- ERM: You have three children and how many grandchildren?
- ACR: I think Martha says ten. I can't always remember their names, but I'm not embarrassed by it.
- ERM: Your children are all by Martha?
- ACR: Yes. They are Alfred Guillou Redfield, Elizabeth (Mrs. Charles R.) Marsh, and Mrs. Martha Koch.
- ERM: Is the middle name Guillou a family name?
- ACR: It is a French name. My mother's ancestors were planters in Santo Domingo and came to this country in the 1790s during the revolution there. My great-great-grandfather was murdered by his slaves, which makes me a very liberal racist.

Martha's background is interesting. It's pure Boston on the medical side. She had a great-grandfather who was one of the founders of the Massachusetts General Hospital. One of the very nice things that she has is a large porringer inscribed on the inside "Good Morning." The inscription also includes, Oliver Wendell Holmes, August 29, 1809, to Martha Putnam, December 22, 1892. I think her father, who was a generation younger than Oliver Wendell Holmes, had been a medical associate to him, so there was a strong affection between them. The porringer was a present made when Martha was born, but was essentially a gift to her father.

- ERM: She is very artistically inclined.
- ACR: Yes. I don't know where that came from. She had an aunt who fancied that kind of thing. Martha went to art school at Boston, and to summer school on the Maine coast, where she studied under Charles Woodbury who was a good landscape painter. She learned something about art that way.
- ERM: We can't help but be greatly impressed by the quality of what hangs on your walls here. It's very beautiful art and a lot of it original, which is always nice to see.
- ACR: In reviewing my background it might be of interest to some future investigator to note the hereditary interest in science which runs through my family. My great-grandfather, William C. Redfield, had an M.A. degree from Yale, and was a pioneer American meteorologist and one of the founders and first president of the American Association for the Advancement of Science. His son, John Howard Redfield, was a botanist associated with the Philadelphia Academy of Natural Science and an associate with Asa Gray. Robert Stuart Redfield, his son and my father, was president of the Philadelphia Photographic Society. My son, Alfred Guillou Redfield, with a Ph.D. from the University of Illinois, is professor of physics and biochemistry at Brandeis University in Waltham, Massachusetts. My daughter, Elizabeth Redfield Marsh, has a Ph.D. from Pennsylvania State University and is professor of geography at Stockton College, New Jersey. Donald Redfield Griffin, my nephew, graduated with a Ph.D. from Harvard and is professor of biology at Rockefeller University. My grandson, Roger Marsh, is a graduate student in psychology at Bryn Mawr College. And my grandson, Benjamin Marsh, is a graduate student in geography at Pennsylvania State University.

EDUCATION YEARS AND PROFESSIONAL SURVEY

- ERM: You took your undergraduate education at Harvard and received your Bachelor of Science degree in 1914?
- ACR: Yes. I had one year at Haverford College [Pennsylvania] and then I transferred to Harvard where my degree was taken in 1913 and recorded "as of 1914."
- ERM: You received your Ph.D. at Harvard in 1917?
- ACR: Yes. My thesis was on the "Physiology of the Melanophores of the Horned Toad."
- ERM: You'll have to explain that to one who knows little about the physiology of horned toads.
- ACR: It's the study of the color changes in a lizard, the horned toad, a phenomenon similar to that of the chameleon. The melanophore is a cell containing a black pigment which can expand making the skin dark in color, or can contract making it light and revealing yellow pigments which may be underneath it. It's a thing which in nature occurs according to the temperature and the light exposure.
- ERM: This happens automatically to the toad depending upon the light conditions?
- ACR: It's a lizard. As a Californian you ought to know these things.
- ERM: I should know these things; you see, I'm not a native Californian. You were a graduate student in England at Cambridge University from 1920 to 1921?
- ACR: Technically, I was enrolled as a candidate for the master's degree. That's how I fitted into the machinery, but I was not actually a candidate for anything. I was there just to get some experience.

- ERM: You weren't really pursuing another academic degree?
- ACR: No.
- ERM: You also went to the University of Munich in Germany in 1930 and 1931.
- ACR: That was the same sort of situation. I had an inferiority complex about organic chemistry, which I felt I needed to know about and was quite sure I didn't understand. I had a sabbatical, so I went to Munich and I took the introductory course in organic chemistry. I came away knowing nothing more about it, at least understanding nothing more, but I was free of my inferiority complex.
- ERM: That must have been a very interesting time to have been in Germany. Do you have any recollections of your experience beyond your involvement with your studies? How did you observe the scene in Germany at that time?
- ACR: Well, you saw the brown-shirted youths standing around the corners. And, of course, what Hitler was doing was in the newspapers. Most of my friends didn't take this very seriously, particularly the anti-Jewish attitude. They felt that was a political posture, and if and when Hitler came into power, that would more or less be forgotten.
- ERM: Does your recollection of that attitude cause you any concern in our present situation today? Do you see any parallels or are they not true parallels?
- ACR: I hadn't thought of it as a parallel.
- ERM: I was thinking of the response of people in a situation like that. You say that most of your friends at that time were really not much concerned about this manifestation.
- ACR: I think the difference is that now my friends are concerned.
- ERM: So that there is in our own American scene a greater sensitivity to a decline in what might be called civil liberties than there was then in Germany.
- ACR: I think so, yes.
- ERM: You received an Honorary Ph.D. from Oslo in 1956, an Honorary Doctorate of Science from Lehigh University Bethelehem, Pennsylvania

in 1965, from the University of Newfoundland in 1967, and from the University of Alaska in 1971. Is that right?

- ACR: Yes.
- ERM: Your experience in teaching was primarily at Harvard?
- ACR: It was primarily at Harvard. I spent one year at the University of Toronto, which was my first substantial position. I was an assistant professor.
- ERM: You were assistant professor at Harvard, too, from 1921 to 1956?
- ACR: I was first appointed in 1921 as assistant professor, then I went up through the grades.
- ERM: I see. You retired in 1956 with the professor emeritus status, which you hold today. From 1930 to 1941 you were managing editor of the <u>Biological Bulletin</u>, and from 1942 to 1956 you were assistant director of the Woods Hole Oceanographic Institution.
- ACR: Yes.
- ERM: You are a senior oceanographer emeritus of the Institution?
- ACR: Yes, there was some little change in title along the route. I was appointed senior biologist, in 1930 and I became senior oceanographer in 1953.

NATURAL RESOURCES COUNCIL OF AMERICA, ORIGINS

Introductory comments

- ERM: You were a member of the Natural Resources Council of America from its formal organization in 1946 and you were its president in 1947. I wonder if we could begin with a question on the origins of the NRCA.
- ACR: According to my notes and recollections I was appointed chairman, not president, at the Mammoth Cave, Kentucky organization meeting in 1946.
- ERM: We have the minutes of that meeting at which you were so elected.*
- ACR: The first meeting at which I actually presided would have been the 1947 First Annual Meeting at Mansfield, Ohio.
- ERM: And the executive committee of the group was named at the meeting at Mammoth Cave, as I recall. That was the first designation, I believe, of an executive committee.
- ACR: I would think so, but I have no clear recollection.

President, Ecological Society of America, 1946

ERM: What would you say were the events that you recall as leading up to the NRCA's creation? You told me yesterday of some preliminary problems and discussions that had, in your view, been instrumental in bringing this organization of conservation groups into existence.

^{*}Natural Resources Council of America, "Minutes of the Organization Meeting," Mammoth Cave, Kentucky, 25 and 26 October 1946. NRCA Papers, Box 3, Forest History Society, Santa Cruz, California.

- ACR: Well, my first personal experience with the matter came in 1946 when I became president of the Ecological Society. I had not been active in the affairs of the Society prior to this but had become a member and attended the meetings as an appropriate place to present my researches in marine biology. In 1945, I was elected vice-president of the Ecological Society. At the first council meeting of the Society, which I attended in 1946, I discovered that as presidentelect I had acquired a hot potato.
- ERM: What was that?
- ACR: A proposal was made by members of the council, supported particularly by C.C. Adams and Robert Griggs, that the conservation committee of the Society be abolished. The feeling was that the Society was not a place to undertake effective action.
- ERM: Of a political nature.
- ACR: Yes.
- ERM: Had this conservation committee existed for any length of time?
- ACR: I think so. I really couldn't answer that without going back through the minutes and the records of the Society. But I think the feeling was that it had not been effective in accomplishing anything. At most, it had issued or asked the Society to issue manifestos and that possibly some annoyance had been created by a demand for funds for its purposes, which other members of the Society felt should be spent on its primary purposes of holding scientific meetings and scientific publication. The council recommended to the Society at its following annual meeting that this committee be abolished. Whereupon big opposition arose, and as a result, it was voted by the Society that the matter should be referred to the membership by mail ballot. It was my duty to conduct this referendum and to make sure that it was conducted fairly to all sides. As a result, I had considerable correspondence with leaders on both sides of the issue to satisfy them that the question was fairly stated. The outcome of the vote was that the conservation committee of the Ecological Society was abolished.
- ERM: Do you remember what proportions voted in the election?
- ACR: I'm afraid I don't.
- ERM: Was it a clear cut decision?
- ACR: It was clear cut, yes.

Ecologist's Union (The Nature Conservancy)

- ERM: What followed in the wake of that decision?
- ACR: Two very important sequelae resulted. In the first place, the group interested in the conservation committee formed an independent organization known as the Ecologist's Union.
- ERM: Did this group then remove itself from membership in the Ecological Society completely, or did it hold membership in both?
- ACR: No, not at all. They remained members of the Society but formed a separate organization, an action group which acted quite independently of the Society. That was one of the things which Adams, at least, had felt was a desirable outcome. He felt that they should form a separate organization, which they did, and it became the Ecologist's Union. It received the support increasingly of persons who were not professional ecologists but were concerned primarily with conservation. It ultimately encountered difficulty with the name Ecologist's Union, which was changed at the suggestion of Richard H. Pough, to The Nature Conservancy.
- ERM: And is that when The Nature Conservancy was born? Did you ever become a member of that group?
- ACR: Not until very much later, after it had become The Nature Conservancy [1950]. As a result of my correspondence with them, I did not have full confidence in their wisdom. So I did not join their group initially. Later, much later, when The Nature Conservancy became established and began actually doing something, I joined and am now a life member.
- ERM: In the light of what has indeed developed, seeing it now in retrospect, do you feel that the action that provoked the establishment of the Ecologist's Union was a good thing for the Ecological Society or not? Would it have been better to have kept the group within the Society?
- ACR: I can't see that the Society suffered in any way. It simply stuck to its last more closely in promoting its scientific objectives. I don't think it lost support of the scientists in the Union in any way.

Meetings prior to formation of NRCA

- ERM: The documentation that I've had opportunity to look at from the NRCA indicates that there were two meetings of a very informal nature held prior to the formal organization of the group. The first of these was held in New York City on October 17, 1944. The second was held on February 12, 1945, and there are evidently records somewhere in the minute book of the Council of these two meetings. Do you recall whether you participated in these?
- ACR: I did not participate but I'd like to check your dates with mine.

Here is something I don't know whether you have: "Conservation's Grand Lodge" by Henry Clepper.*

- ERM: The article in American Forests. Yes, I have seen that.
- ACR: It's very informative and has a picture of all the chairmen and their dates. He starts in with the first annual meeting, which was called by Redfield, September 15, 1947 in Mansfield, Ohio.
- ERM: That was the first formal annual meeting.
- ACR: The article also gives the officers. "They had been elected at the Council's organizing meeting at Mammoth Cave National Park the previous October. But the Council's origins go further back than that. In October 1944 and again in February 1945,..." **
- ERM: Those are also the dates I have. These dates, incidentally, are drawn from the official minutes of the organizational meeting as composed and presented by the secretary, C.R. Gutermuth. *** To what extent were you involved in these earlier meetings which were the forerunners to the organizational meeting?

*Henry Clepper, "Conservation's Grand Lodge," <u>American Forests</u> 73, no. 10 (October 1967): 22.

**Ibid., p. 22.

***Natural Resources Council of America, "Minutes of the Organization Meeting," Mammoth Cave, Kentucky, 25 and 26 October 1946. NRCA Papers, Box 3, Forest History Society, Santa Cruz, California.

- ACR: I know nothing about them, in fact, I think it wasn't until I read this article of Clepper's that I became aware of the fact that they had held prior meetings.
- ERM: The Mammoth Cave meeting was the first meeting of the NRCA that you attended?
- ACR: Correct.
- ERM: Did you go to the St. Louis meeting on September 4, 1946, which was the meeting immediately preceding the organizational meeting?
- ACR: Yes. In 1946 at the meeting of the American Association for the Advancement of Science held in St. Louis, there was an informal discussion of the proposal to form some form of association.

Interest in forming a large organization

- ERM: What is your recollection of the origins of this idea? Did it come primarily from the scientific community, or was it coming from the activist conservation community?
- ACR: It was the activist group. Its members had come to realize there would be strength in unity, and these meetings in 1944 and 1945 were discussions of this possibility. What they were like, I do not know.
- ERM: This was towards the end of the war. Did that event have any impact on the formulation of the group and the stimulation of discussion about the need for such an organization?
- ACR: Well, I suppose it had impact. For example, the meeting in 1946 in which we abolished the conservation committee of the Ecological Society, was the first meeting that the Society had held for several years because of the war. In other words, everything stopped during the war, so that there was a gestation period. It wasn't until things quieted down that we got back to business as usual, that people were ready to go ahead and do something. I suspect that was what the situation was.
- ERM: The termination of the conservation committee of the Ecological

Society came almost concurrently with the formal establishment of the NRCA. Correct?

- ACR: Yes.
- ERM: Would you relate these two acts in any direct way? I suppose that they were related.
- ACR: I'd always felt that they were. It's hard to say just how it acted.
- ERM: How long prior to 1946 do you feel you and your friends in the conservation movement had envisioned, perhaps dimly, the creation of of an organization like NRCA?
- ACR: I don't think I and my friends had any thought about it. We were concerned with science. Sure, there was the Audubon Society and several others that we may have thought were good things to support, perhaps we were actually members with five-dollar memberships and that kind of thing, but they were very minor considerations in our lives. I'm speaking now of the scientific people. Now, there were certain of them like C.C. Adams, who were professional conservationists--he'd been the state officer of conservation in New York state--and probably had their legs in both puddles.
- ERM: In other words, the real thrust for organizing a greater cooperative effort along these lines was coming from representatives of the activist groups.
- ACR: Yes. I'm sure that that's correct.
- ERM: And you in the scientific community were being invited into these discussions?
- ACR: Yes.
- ERM: Because the activists felt a closer liaison with you would give greater cohesion to the conservation movement's efforts. Is that right?
- ACR: I think that's fair enough. Yes.
- ERM: Did the passage of the Lobbying Act of 1946 affect in any way the plans for the organization of the Council? *

*Federal Regulation of Lobbying Act of 2 August 1946, 60 Stat.839.

- ACR: Not so far as I know, but undoubtedly it may have.
- ERM: May have? But to your recollection?
- ACR: What was the Lobbying Act? In other words, I'm displaying my ignorance which goes back to my ignorance at the early time.
- ERM: The Lobbying Act of 1946 defined the limits within which groups might lobby and still enjoy independence as nonprofit organizations. Now, those practices have been even more closely defined in recent years.
- ACR: Yes, well that certainly would have effected all of the conservation organizations. It might have had some effect on the scientific organizations, on the feeling of their members, that they'd better keep out of active lobbying altogether.

ORGANIZATION MEETING, NATURAL RESOURCES COUNCIL OF AMERICA, MAMMOTH CAVE, KENTUCKY, 1946

Early participants and statement of purpose

- ERM: Who among your contemporaries at that time, who took leadership roles in developing the NRCA, do you feel were the most important in defining what it was to be?
- ACR: I think C.C. Adams and Robert Griggs were the people who were most active in the discussions within the Ecological Society.
- ERM: But in the larger community of interest groups, which eventually came together and formed this organization, who were the principal architects of the council idea?
- ACR: Howard Zahniser was the man who sticks out in my memory of the earlier meeting in St. Louis in 1946. He supported the idea strongly and expressed the limitations under which it should operate. He was very clear that none of the conservation societies should lose their sovereignty, and it was for that reason that the Council had as its objective, mutual information, but independent individual action by the groups.
- ERM: Did you regard Mr. Zahniser as representative of the activist group?
- ACR: Yes, he was from the Wilderness Society.
- ERM: In presenting his written statement to the Mammoth Cave organizational meeting, he took great pains to recognize the hesitation of the scientific community with becoming involved in any cooperative ventures that might prejudice their independence as scholars.

^{*}Natural Resources Council of America, "Minutes of the Organization Meeting", Mammoth Cave, Kentucky, 25 and 26 October 1946. NRCA Papers, Box 3, Forest History Society, Santa Cruz, California. pp. 2-3.

- ACR: I don't recall the details, but what you state seems consistent.
- Zahniser's written statement is preserved in the minutes of the ERM: meeting. From the reading of this, I get the very clear impression that he came in with a formally written statement, whereas other members of the group only orally registered their comments, some of these recorded in the minutes. Your own comment on organization policy and procedure was this, " The purpose of virtually all scientific societies is education. They can give facts for publicity but will not disseminate news." There are a number of other comments registered by others who were party to this meeting. But then more fully given is the written statement of Mr. Zahniser, which was evidently read to the group. In that statement he takes, I believe, rather great care to indicate that the new organization or the new group be called the American Conservation Council and he took great pains to alleviate any fears that the scientific community might have with regard to becoming involved in a cooperative venture with activist groups. Now, do you feel that the NRCA, as it was set up, adhered to that initial statement of purpose?
- ACR: I think so. Yes.
- ERM: And there was never in any future time any feeling that it had departed from initially stated purposes?
- ACR: Not that I am aware of.
- ERM: How important were other individuals in those first meetings? Who do you consider the real thought leaders of the group? You've mentioned Adams and Zahniser. How important were Harry Radcliffe, Carl Shoemaker, Charles Woodbury, and C.R. Gutermuth, all of whom were very active in early meetings?
- ARC: Woodbury and Gutermuth I remember as rather active participants.

Carl D. Shoemaker and Conservation News Service

I don't remember that Shoemaker appeared in the initial meetings. I remember his coming later. He was a magician among other things, a very good amateur magician. I remember his entertaining us with some of his tricks at one of the meetings, which must have been about 1948. He was the secretary of the Senate committee on natural resources, so he was in a very strategic position to run the news service of the Council, since his immediate professional business was to follow everything that was going on in Congress.

- ERM: Was he not connected with the National Wildlife Federation?
- ACR: He may have been.
- ERM: That was his designation on the membership list as it was issued in the summer of 1947.
- ACR: At the Mansfield, Ohio meeting?
- ERM: This membership list was composed and evidently distributed to the members of the council. Shoemaker was, like all members of the Council, primarily related to another organization, in his case a representative of the National Wildlife Federation. He was given special responsibility for writing and editing the NRCA newsletter, <u>Conservation News Service</u>. He had a very key and central role in the early days.
- ACR: Yes. But he probably was not an executive of the National Wildlife Federation that you said he was associated with.
- ERM: The designation here on the membership list does not indicate that he was an officer, it just says he came as the representative of the National Wildlife Federation. I take it that he must have had some position of importance on the staff of the Federation or he wouldn't have been there. Most of the other representatives were important leaders in the organizations from which they came.
- ACR: He had this key Council position because he was the secretary of the Senate committee. His job was to follow legislation through, to know what was going on. And I would suspect that it was for that reason that he was given the job of editing our newsletter, which he did very well. And, of course, he established the traditions of this news service which haven't changed very greatly through the years. That was his importance. But which of these societies he may have adhered to as a member, I wouldn't know. The National Wildlife Federation later picked him to be their representative for some reason of their convenience.
- ERM: It was his work as author and editor of the <u>Conservation News</u> <u>Service</u> that provoked some agitation within the membership of

the Council a few years later. There was some objection raised to his editorializing.

- ACR: I have no recollection of that. It probably happened after I was out of the NRCA.
- ERM: What do you recall about the publication, <u>Conservation News</u> Service?*
- ACR: In form it was very much like the present newsletter. I think they have now divided it into two parts, one of which is a review of legislation and its progress through the mill, and a second part which is a more general discussion of matters and events of interest to the various members. I used to find it very interesting to read after I had ceased to be active in the organization. I still get it as an honorary member. I look forward to reading it because I find it a good way to learn what is happening.
- ERM: Was the need for prompt intelligence on developing legislation one of the principle reasons for being of this Council?
- ACR: I think so. I think the idea was that each of these organizations should know what the hot questions were. They would then decide whether they would write to congressmen and so on in support or in opposition to what was under discussion.
- ERM: This would obviate the need for each one of them having their own reporters.
- ACR: Yes. Because it's an elaborate business to know just what is happening in Congress. My feeling is that the news service is probably the most effective thing they do.

Alfred C. Redfield, Chairman, NRCA, 1946-1948

ERM: I take it that your involvement in the early meetings of the NRCA resulted from your being invited into the group by other people who

^{*}The name of this publication was changed to <u>Legislative News</u> <u>Service</u> in 1957.

were perhaps more actively involved in organizing it.

- ACR: I would think so, yes.
- ERM: And then you became the first chairman named at the Mammoth Cave meeting. *
- ACR: Yes.
- ERM: Inasmuch as some of the other participants were far more actively involved in its organization, how do you explain their selection of you as the first chairman?
- ACR: I was neutral; I was not active in any of the conservation organizations. I was nothing but a scientist, you see, with an interest in the big problem. So the group did not have to decide for example, between Johnny Baker who headed the Audubon Society which is one of the big ones, or Ken Reid who headed the Izaak Walton League which is another. They didn't have to decide which of these organizations, in a sense contending, would be honored by its leadership. I was a guy that, so far as anybody knew, had no special interest in any one of them. I think it was a sensible move, and it also meant that I really never took any position of leadership in the whole thing. I felt incompetent. I didn't know what it was all about really and was trying to find out.
- ERM: And you stayed on as chairman for two years.
- ACR: Then the thing seemed to be stable and I had found that I and my scientific colleagues were not particularly useful to the organization, so I thought it was appropriate that somebody else should take over.
- ERM: It was C.R. Gutermuth, I believe, who took your place.
- ACR: No. It was Howard Zahniser, from 1948 to 1949.
- ERM: Then who followed Zahniser?
- ACR: And then from 1949 to 1950 came Paul Sears, who is primarily a scientist. He was a member of the Ecological Society. Then came Henry Clepper from 1950 to 1951. He was then head of the Society of American Foresters. The fifth one was William Voigt, who I guess was an Audubon Society man.

^{*} For a complete list of men who served as chairmen of the NRCA, see Appendix A, p. 60.

- ERM: The members of the executive committee first named under your chairmanship were C.R. Gutermuth, Harry Radcliffe, yourself, Carl Shoemaker, Charles Woodbury, and Howard Zahniser. And I take it that you six men were really the principal leaders of the organization in the first years. Mr. Gutermuth was secretary of the American Wildlife Foundation at that time; Mr. Radcliffe was vice-president of the American Nature Association; Mr. Shoemaker was with the National Wildlife Federation; Mr. Woodbury was with the National Parks Association; and Mr. Zahniser was then executive secretary of the Wilderness Society.
- ACR: I don't think Mr. Woodbury was an officer of the National Parks Association. He was a very faithful attendant at meetings.
- ERM: The date of this membership list is September 1, 1947, and I don't find your name among the twenty-five members. Was that perhaps because your organization or you were not paid members of this group?
- ACR: Well, I was chairman of the Council at the time.
- ERM: Right. But I don't find your name here on the list of names and addresses of the members even though I find the others.
- ACR: You see, the membership is really by society. Now, I think you'll probably find Paul Sears or someone like that.
- ERM: Paul Sears is listed here for the Ecological Society.
- ACR: Yes. That's the point, you see. He was the official representative elected by the Ecological Society to the Council. Devereaux Butcher was executive secretary of the National Parks Association, and perhaps Mr. Woodbury, then, was their designated representative rather than Butcher. I can't remember Butcher attending any of our meetings.
- ERM: Did any of the agencies or bureaus of the federal government have participation in these meetings in the early times?
- ACR: No. I suspect it was a matter of policy not to have them.
- ERM: You mentioned Dr. Adams as being a member of the Ecological Society. That's what I believe you said a little earlier. I think, actually, he was recognized as being rather independent of any participation or representation of any of these groups and as such

he was designated as the first honorary member of the Council in order to give him recognition.

ACR: I think Adams was made an honorary member of the NRCA because not being a representative of any society he would not be automatically a member of the Council and we wished to give him a status which would keep him active in the Council. Subsequent honorary memberships, like mine, have been a recognition on retirement.

> He was very active in the fuss that we had. He was the fellow who persuaded the council of the Ecological Society to recommend getting rid of its conservation committee and he was the fellow who told us that we should join with these other societies and he undoubtedly arranged that we participate in the AAAS [American Association for the Advancement of Science] meeting which took place in 1946 in St. Louis. I've forgotten who the fellows were who arranged that meeting.

- ERM: How would you characterize Dr. Charles C. Adams?
- ACR: I thought he was a very intelligent, capable man; articulate, energetic.
- ERM: Would you say that he was one of the real driving forces in creating this group?
- ACR: I think so. Yes.
- ERM: Along particularly with Howard Zahniser?
- ACR: Those are the two people that I remember vividly as being the supporters of the whole business, who argued its reason for being.
- ERM: Did Adams take an active part in the affairs of the Council during the time that you were associated with it, or did he fade out of the picture very soon?
- ACR: He certainly faded out very soon. He became an honorary member.
- ERM: That evidently was a part of the action of the organizational meeting that he be so designated.
- ACR: As an honorary member.
- ERM: Yes. And you also were designated as an honorary member sometime later.

- ACR: I think on my retirement. Do they have a list of honorary members now? Yes, here they are. The surviving honorary members are Carl W. Buchheister, Henry E. Clepper, Fred E. Hornaday, Harry E. Radcliffe, Alfred C. Redfield, Paul B. Sears, and C.R. Gutermuth. And if you look back over earlier lists, you'll find probably that the various ones who have passed on are there, such as Adams.
- ERM: Here is a list composed as a part, I believe, or as an addendum to the minutes of the organizational meeting at Mammoth Cave, and it purports to list the representatives and organizations which composed the Council in its beginning. * You were there as a representative of three groups, the Ecological Society of America, the Limnological Society, and the Woods Hole Oceanographic Institution.
- ACR: Of course, I was a member of the staff of the Oceanographic Institution but they never appointed me to anything in connection with the Council.
- ERM: People present as observers at this organizational meeting, who were subsequently invited to membership were Henry Clepper, executive secretary to the Society of American Foresters; Dorothy M. Hill of the Sierra Club of California; Arthur C. McFarlan representing the Geological Society of America; and Tom Wallace of the Louisville Times representing the American Planning and Civic Association.
- ACR: I remember Tom Wallace very vividly. He turned up,I guess it was, for the Mammoth Cave meeting; he was a newspaperman, as I remember, from Louisville, Kentucky. This was, you see, the organizational meeting, and people were kind of pussy-footing. But Wallace made a very effective speech. He said, "We've come down here to do something, now let's do something!" It was as simple as that. And they turned around and they did something instead of fussing about this little thing and that little thing. He really put in a very important word just at a critical moment. He completely dropped out of the whole thing after that.
- ERM: But he served as a catalytic agent?

^{*}For a copy of the list of the "Members and Observers at the Organization Meeting of the Natural Resources Council of America," see Appendix B, p. 60.



The late Tom Wallace, editor of <u>The</u> <u>Louisville Times</u>, in the composing room of the newspaper, 1949. Photograph courtesy of <u>The Louis-</u> <u>ville Times</u>.

- ACR: A catalytic agent, right. He was a very effective man. He was the most vigorous personality that I saw in the whole business. He did it in just this way, suddenly standing up and saying, "For God's sake, what are we here for?"
- ERM: This is one of the reasons why oral history has value. You have a very vivid impression of the impact of one man's participation that is not reflected in the formal minutes of the meeting.
- ACR: Yes. I was sitting there watching this thing develop. There was obviously much discussion of ideas about things which were perhaps not too important. I was happy when suddenly this guy got up and he layed it down in two or three words. We were there to do something, so for God's sake let's do it! It changed the whole tenor of the meeting.
- ERM: Is it a characteristic of scientific groups, that in their meetings they get involved in a great deal of fussing and pussy-footing?
- ACR: I think it's characteristic of human beings. You find it just as much here in a town meeting. There are relatively few people who are able to follow a logical thought and not get deflected by the side issues. You know that.
- ERM: That's right, and it is always necessary for someone in the group to cut through to the heart of the matter and state the point.
- ACR: I don't know whether you know who Charles Francis Adams was. He was the secretary of the navy in the Hoover administration. He was a great yachtsman and he was also very much an Adams. John Quincy Adams was his grandfather. Well, Charles Francis Adams was a trustee of every important institution in Boston and he was a trustee of the Woods Hole Oceanographic Institution during the early years. He was a neighbor of Henry Bigelow, who was director of the Institution. During the war, World War II we had a very able and intelligent, liberal-minded director, a young man named Columbus Iselin. He was a man who felt the war very strongly. A group would come up from Washington, some naval people, and they would discuss something the navy wanted to get done to find out about the ocean. Columbus said, "That's fine, we can do that." The naval fellow said, "We'll send you a letter of intent and then that will be followed by a contract." So Columbus would go to work the next day working on this thing even before he had anything in black and white.

Well, we had a trustee from New York, a very fine gentleman, and he got suspicious that the Institution was being run in a very lax way and at the next annual meeting when the director was giving his report, this fellow interrupted him and began asking him searching questions, and old Mr. Adams interjected, "For what purpose are we discussing this matter?" And that was the end of that. Some years after, this gentleman from New York said to me personally, "You know, I think I made a fool of myself in those days. You Boston boys know each other so much better than we do in New York, that you trust one another."

- ERM: And he could not adjust his mind to that kind of thing?
- ACR: Not so quickly, but he later saw the light.
- ERM: What caused you to drop out of active membership in the Council? And who took your place on the Council to represent the groups that you had previously represented?
- ACR: Howard Zahniser succeeded me as chairman and Paul Sears became the representative of the Ecological Society.

INVOLVEMENT OF SCIENTIFIC SOCIETIES IN NRCA

Scientists expectations

- ERM: What about the limnologists [American Society of Limnology and Oceanography, Inc.]? How were they represented after you left?
- ACR: I think a man named [Thomas H.] Langlois from the University of Ohio, who ran a laboratory on Lake Erie, was the representative. I was active in that society and I suppose I was probably the person that persuaded them to come in, as I did the American Society of Zoologists. The ecologists, limnologists, and zoologists were the three scientific societies in addition to the Society of American Foresters, but that was an association of professional foresters, which were a little bit different from professional scientists.
- ERM: What were the benefits or uses you expected from a league of conservation organizations? What did you expect this new Council would do most specifically for you and your interests?
- ACR: Well, I think that in a general way the students of nature, which would include any of the scientific organizations, zoologists, geologists, whatnot, have a stake in the preservation of nature and what is done to improve or not improve it. This seemed to be a potential method of protecting these interests.
- ERM: Did you see the war years as years in which your outdoor laboratory was being very seriously used up?
- ACR: No. I think that one saw that in the general course of time, human beings were messing up nature from place to place, and it was desirable to have organizations trying to counter that. That, of course, is the great thing which has been happening in the last ten years or so. People have become increasingly aware of the importance of paying some attention to what they do to nature.
- ERM: Do you recall that there was any great new explosion of public use of wild areas and what might be called your laboratory areas,

during the latter years of the war? If so, did it agitate you in any way, or arouse your anxiety?

- ACR: I don't think so.
- ERM: Was there any sudden proliferation of legislation in the Congress or proposed legislation, which you became aware of vaguely but wanted to know more specifically about, that provoked your interest in this large group?
- ACR: No.
- ERM: It was not then an information-seeking concern that attracted you to participate in this group?
- ACR: No.

Science Service Committee

- ERM: Was it a desire on your part and that of your scientific colleagues to somehow or other make more available to other conservation groups resources which you had in the way of special knowledge that you felt might not have been well enough known to them?
- ACR: Yes, I think there was something in that.
- ERM: Would you explain?
- ACR: Yes. The fact was that the membership of these societies, particularly the Ecological Society, contained experts on many aspects of nature, distributed on a national basis. I thought that the scientific societies would be in a position to supply the activist societies with the names of people in almost any part of the country who would be experts in providing them with information pertinent to their problems and to that end a scientific advisory committee [Science Service Committee] was established. It was prepared to advise any of the Council's members as to who might have scientific competence to answer their questions.
- ERM: I gather this advisory committee was an ad hoc group outside of the Council?

- ACR: This was a group in the Council. There must be a record of its members somewhere. I don't have it. All I remember is, that I was chairman. I presume there were other members. They were probably representatives of the Zoological Society and the Limnological Society.
- ERM: Was the creation of this committee an input of your own as first chairman?
- ACR: I suspect that it was.
- ERM: Then it represented, perhaps, a statement of your concern as a representative of the scientific community, that this was one of the purposes for which the Council existed.
- ACR: Yes. It was certainly one of the purposes for which the scientific societies should exist in the Council. I suspect that behind it was the suspicion that these organizations were not getting very adequate scientific advice. I think I told you that at one of these meetings, I had occasion to walk in the woods with several of the executive secretaries of these various organizations. I found that I was a much better naturalist than they were. I knew what the names of the trees were. These fellows were utterly ignorant. I sort of wondered whether these societies were getting really good scientific advice. Now the outcome of that was, that I have no recollection of ever receiving any inquiry from any of these societies for scientific information about their problems.
- ERM: What did that do to the attitude of scientists towards the Council and its various other members? Did it cause any diminution in their participation in the Council?
- ACR: The only thing I can say to that is, that if you look over the modern list of the members you will find that the American Society of Zoologists and the American Limnological Society American Society of Limnology and Oceanography, Inc.] are no longer members. In other words, it was a dead issue. It was a mistake to have ever started it.
- ERM: And was there ever any feeling that perhaps your involvement in its beginnings might have been something to which you lent your prestige and your names but to which there was no real follow through?
- ACR: I think it shows it wasn't a viable idea. And, I suspect it was not a viable idea because when these problems come up and reach the legislative area, there isn't time to make an adequate scientific

study. That takes a lot of time and may take a lot of money.

- ERM: An original study might be out of the question, but what about the great resources of prior-conducted research which already existed and could be cranked in?
- ACR: It could to a certain extent.

PERSONAL VIEWS ON USE OF SCIENTIFIC STUDY

Salt marshes

- ERM: To what extent are the activists apprised of the foundations of scientific knowledge which relate specifically to their concerns? In your observation have they become better informed of these in conducting their affairs? Do you see any change in the picture?
- ACR: Well, I'm inclined to think that they work from very general and often from very ill-established principles. For example, I have spent the last ten years since my retirement studying a particular salt marsh in trying to find out how this marsh has developed in time which I can measure by radio-carbon analysis. I published a paper on it which is a fairly full account of what I found out. * I have had between 300 and 400 requests for reprints of that paper. I have never had anything approaching that before, these requests from all over the world--New Zealand, South Africa, South America. Perfectly extraordinary, the interests there are in the salt marshes.

Now, if you look at the popular literature, conservationists have been strongly arguing that salt marshes are very precious things; that it takes six thousand years to develop a salt marsh. I have seen acres of salt marsh appear in five years. I can show you other marshes of which the oldest ones are less than four thousand years old. That simply means that somebody is writing rather loosely. You have to look at each case to see what is happening.

^{*}Alfred C. Redfield, "Development of a New England Salt Marsh," <u>Ecological Monographs</u>, 42, no. 2 (Spring 1972): 201.

Alaska pipeline

- ERM: Do you see other contemporary illustrations of this? There's a great deal of public concern, of course, in discussion over what an Alaskan pipeline might do to the tundra and wildlife. Is there any parallel in this do you suppose?
- ACR: Well, I don't really know the answer to that.
- ERM: Have you heard anything from your colleagues who have done research in that area?
- ACR: No. Many things about the tundra are very well known. If you drive a jeep across it two or three times, you kill the vegetation and it tends to wash away, and make a gully, and that kind of thing. There are a lot of just common observations about it which have accumulated in a course of time, many of them in the course of geophysical exploration for oil and so on. There are questions about the migration of the caribou, for example. Would the pipe-line make a barrier to their movement? Whether it really would make very much of a difference? I have an idea there is one caribou herd to the west and another to the east of its proposed course and that the migration of these herds may not cross the pipeline's location. Things like that, which perhaps are not fully taken into account.

Wetlands laws

- ERM: But the concern you have expressed is with conservation organizations that do not always take as deep a look into the established body of scientific knowledge as they might reasonably do to their profit.
- ACR: I don't quite like to say yes to that, but I suspect that in many cases it's true. Another thing comes in here also, that I see working on a local scale as a conservation commission member. You have got some fairly concrete laws and what we have to do is decide whether this particular area is covered by this law or is not covered by it. You take particularly the wetlands laws. You're not supposed to grade or fill the wetlands without hearings and permission from town officials, and so on. How in hell are you

going to define a wetlands? My definition is, can you sit on it without getting your pants wet? I've actually done that. The selectmen asked me to look at a piece of woodland which someone wanted to fill, and they wanted to know whether it was a wetland. I went down there with galoshes on that high. It was covered with ice. I walked across the ice. I broke through it in two or three places and went in over my galoshes. I came back and showed that to the selectmen, and they decided it was a wetlands. But if you went down there in the middle of summer, it would probably be perfectly dry.

The definitions of the law are very vague and what the town conservation commissions have got to do is to look at things sensibly irrespective of the inexact letter of the law. Of course, we're only advisory. The law is wisely written so that it says what the town may prohibit under certain circumstances. It doesn't say it has to prohibit. So we look at a place which technically, no doubt, is salt marsh but if it is covered up, it won't make any difference; you tell the fellow to go ahead and do what he wants.

- ERM: How serious is the problem of diminishing wetlands in this section of the country, in your view? Are we in a very serious condition as far as the decline of these areas is concerned?
- ACR: Well, there's no question that probably within forty miles of New York City, they are diminishing. In that area where the real estate values are enlarged by the large local population, it pays to fill these areas. In Connecticut the number of marshes which have disappeared is quite substantial. That would not be true in Massachusetts at present, only very locally around the large cities would it be true.
- ERM: The megalopolis intrusion on these lands will continue apace, will it not?
- ACR: Yes, it will continue, I suppose.
- ERM: Do you feel any great concern about that accelerated demand for other uses of these lands? Do you think it's getting out of hand at all?
- ACR: No. I think that the control is accelerating faster than the demand. I think on Cape Cod, for example, there has been practically no filling since these laws went into effect.

NRCA, THEN AND NOW

Ideals of organizers

- ERM: Dr. Redfield, perhaps we can return to the NRCA subject here a little more directly by my asking you a new line of questions. Do you believe the founders of the Council all had the same vision of what functions the Council would indeed carry out? Or do you feel that the Council, during the 1950s and 1960s, revealed that the founders had somewhat slightly different concepts of what the Council was to be?
- ACR: I think that they developed a pretty good unity of opinion at the first two meetings. How much they differed before is hard to say without knowing exactly what they each said at these meetings. Undoubtedly, their thoughts became organized as a result of those discussions. I think that a community of belief developed which persisted as long as I remained active in the Council. So far as I know, it has not changed essentially since. Somebody who has been in the thing for a longer period would have to answer your question.
- ERM: Why did the organizers not want the Council to be a policy making body?
- ACR: I suppose because each society wanted to make its own policies. They did not want to yield any sovereignty to this common group.
- ERM: Do you consider that policy was a wise one in the long run?
- ACR: Yes.
- ERM: Do you feel that the NRCA has been able to remain faithful to its original principles?
- ACR: So far as I am aware, but I have not followed very closely just what they have done since.

Withdrawal of scientific societies

- ERM: Has there been a problem of any kind with the activist versus the scientific members of the Council over the years?
- ACR: Not that I am aware of.
- ERM: What about the withdrawal of the ASLO [American Society of Limnology and Oceanography, Inc.] from participation? Was not that a reflection of some difference of opinion?
- ACR: I don't know. I wasn't present at any meeting when that decision was made. It was made on the basis of whether ASLO thought that it was worthwhile to contribute twenty-five or fifty dollars, or what have you, to the NRCA, and I suspect there was no member in the Society who was particularly interested in the activity of the Council and so they decided to drop it.
- ERM: Was the Society's decision to drop it in any way influenced by a seeming lack of interest on the part of Council constituent members in coming to the Society's members for information on subjects of which they were expert?
- ACR: Well, what I really suspect is that most of the members of the Society forgot about the whole thing between the annual meetings when they were asked to vote to appoint representatives. I don't know whether Professor Langlois had to be replaced or whether nobody seemed to want to replace him on the Council.

Comments on Thomas H. Langlois's disenchantment

ERM: I have, I think, some information on that. Thomas H. Langlois replaced you as the representative of the ASLO to NRCA, but later he became somewhat disenchanted with the NRCA. I would like to ask how justified do you feel were his claims that, first of all, NRCA was biased in favor of federal authorities over state authorities, and secondly, his claim that the NRCA requested and then ignored reports made by the scientific member groups of the Council, and thirdly, that the NRCA was a front for the action groups who "used" the scientific groups. There is a letter here in our note file from Thomas H. Langlois to J. W. Penfold, dated February 8, 1963, which would tend to support this contention that there was some schism in the ranks over what the NRCA was doing and why. * I have that letter here; are you acquainted with this?

- ACR: No. No, this is all news to me.
- ERM: Rather than read the whole letter into the tape, I'll hand it to you and let you read it and then ask you to comment upon it.

Pause

Do you have some initial response or comments on that letter?

- ACR: Well, I think it makes it perfectly clear why the ASLO group dropped out. I didn't know it had occurred but I had stopped going to meetings by that time.
- ERM: You had no exchange of correspondence with Langlois at that time?
- ACR: Not at that time.
- ERM: Wouldn't you have assumed that as your successor, and as representative of this group, that Langlois might have expressed some of these ideas to you and checked with you on how you felt about them?
- ACR: It would have been courteous if he had done that, yes. I remember his coming to the meetings while I was coming to them. He was a pleasant fellow and I enjoyed him. He evidently had some bones to pick. That portion of the letter which deals with the report to Dr. Robert William Pennak, contains a few statements which are pretty dubious.
- ERM: What are these?
- ACR: Now, let's see. In the second paragraph of that letter under "1. The NRCA was organized to bring together representatives of such groups of crusaders as the Sierra Club, the Izaak Walton League, the Nature Conservancy, and especially such organizations

^{*}Thomas H. Langlois to J.W. Penfold, 8 February 1963. NRCA Papers, Box 7, Forest History Society, Santa Cruz, California. For a copy of this correspondence, see Appendix C, pp. 62-3.

as the Wildlife Federation, the Wildlife Institute, the Sports Fishing Institute, the Natural Parks Association, the Soil Conservation Society, and the Society of American Foresters, which 'front' for the corresponding branches of the federal services." In the first place, The Nature Conservancy did not exist at that early time. The Sierra Club was not active, although it may have sent a representative quite early. And in what sense can you fairly say that the Audubon Society, for example, was a front? This fellow evidently had a bias against the federal services.

Then it further says under "2. The principle, and almost sole, function of the NRC has been the financing of listing of bills before congress under the headings of 'legislative news service,' ..." Well, it was perhaps the principle evident activity, but I think the function was one of bringing these societies together for some form of cooperation. The NRC is essentially an executive's club. It's the place where these various fellows who were running these societies do get together and get to know each other, can exchange ideas and information. So Langlois's is a narrow statement.

- ERM: Was exchange of ideas a function of great importance in your view?
- ACR: In my view the major purpose of it is to coordinate the action of very large diverse groups so that if possible, they'll act in harmony. Under "3. Organizations of scientists such as ASLO,..." and so forth, "... were invited to join the NRC and the reason cited was to enable the propagandists to have access to authoritative statements about whatever conservation problems might arise." That's true. "The real reason was to lengthen the list of people who might bring pressures, pro or con, as suggested by the crusaders, on congressmen or other officials..." Now, that's utterly nonsense, you see. How does he know what the real reason was?
- ERM: He says it rather categorically.
- ACR: Very categorically. He doesn't know, and it wasn't the reason. I'm perfectly convinced.
- ERM: In other words, he's implying that you and others were used, perhaps, in this whole affair?
- ACR: Yes. I don't think that was true.
- ERM: And you had no sense or feeling and do not have now that that was the case?

- ACR: That's right. Then he says under "5. The issuance of news releases duplicates a service being rendered by the National Wildlife Federation. Any of us, or anyone else might get these same news releases simply by writing for them." I get both of those releases. I throw the ones that I get from the National Wildlife Federation into the scrap basket, because they're less complete and I'm sure that they're based on the same information, and at the earlier period they were both probably prepared by Carl Shoemaker. I don't have a feeling that this is a very critical judgment of the Natural Resources Council.
- ERM: This letter was written, of course, in 1963, which was at least fifteen years after you had dropped out of active participation.
- ACR: Yes. And fifteen years during which he had been quite a faithful member. I was always impressed by the fact that Langlois usually turned up.
- ERM: Perhaps in his view, at least, the conditions had changed in those fifteen years in such a way as to have provoked him to this utterance.
- ACR: In the three paragraphs at the end of this letter it becomes quite clear that his nose is out of joint because of differences of opinion with regards to the management of fish in Lake Erie, which he probably knew a good bit about, and his idea that the NRC endorses and seeks to further such federal programs as may be handed out, rather than to give adequate consideration to problems themselves. I think you'll see if you read that that he's upset about the federal managements and he clearly states that he thinks that these organizations are fronts for federal agencies, which I think is quite incorrect.

Withdrawal of scientific societies and value of scientific knowledge

ERM: Ten years earlier, in 1953, secretary of the Council, C.R. Gutermuth, announced that the American Society of Mammalogists, the Ecological Society of America, and the International Association of Game, Fish, and Conservation Commissioners had resigned from NRCA. Do you have any understanding or recollection of why these groups all dropped out?

- ACR: No. This all happened after my day.
- ERM: Well, the departure of these groups from membership in NRCA may have been for any number of reasons.
- ACR: Yes. That includes the Ecological Society?
- ERM: Yes it does, but it's also noted here that the Ecological Society rejoined the group the following year, 1954.

Have you any feeling, as a member of the scientific societies which have been members of the NRCA, that you contributed as much to NRCA as you had envisioned when you helped to organize the Council?

- ACR: I'm of the impression that we have not. Largely because I don't think we were asked.
- ERM: Is it also perhaps a function of the fact that as scientists you are less inclined to be actively involved in such ventures as this?
- ACR: I think that's true. I mean, as scientists we're inclined to do what we damn please, and I think we're right about it.
- ERM: And your focus of interest is on other things?
- ACR: Yes, and unless there's some very good reason, we don't go out and study the practical problem. It's perfectly true that we have not been asked to go out and study the practical problems, and the reason is that it's costly to study these practical problems. It takes time and none of the conservation agencies has seen fit to ask through the societies whether they may have done research on one of their own problems. I'm sure that the Audubon Society would claim that they do quite a lot of research themselves.
- ERM: What was in your mind in 1947 when, as chairman of this group, you named a scientific advisory committee? Did you feel that perhaps by this act the scientific community would make larger inputs into the activity of the Council?
- ACR: I thought they might if the members of the Council wanted it.
- ERM: But that advisory committee was allowed to lapse or collapse in the early 1950s as I see by the record. It was again reconstituted, however, in 1955.

- ACR: I don't know the later history.
- ERM: Was it your idea or that of someone else to create such a committee?
- ACR: I suspect that it was my idea, because I was the active scientist among the initial organizations. It may be quite possible that somebody else suggested it to me.

Recap of NRCA activities

- ERM: What would you have to say about the special studies that have been sponsored by the Council? For example, the proposed Rampart Dam in Alaska and the Public Land Law Review Commission findings? * Have these been beneficial to the protection and conservation of the natural resources involved, in your view?
- ACR: I can't answer. I'm not familiar with what they have done.
- ERM: NRCA draws up legislation, holds meetings, and issues and requests reports on legislation. How would you define lobbying for tax purposes? Do you feel that the Sierra Club should have lost its status?
- ACR: Those are legal questions that I'm incompetent to have opinions about.
- ERM: Do you recall any specific instances where the NRCA came close to taking a position on an issue when it became difficult to assume and hold the position of a mere forum?

^{*}Stephen H. Spurr, Ernest F. Brater, et al, <u>Rampart Dam and the</u> <u>Economic Development of Alaska: Summary Report</u> (Ann Arbor, Michigan: University of Michigan School of Natural Resources, 1966). Wayne N. Aspinall, chairman, <u>One Third of the Nation's Land: A</u> <u>Report to the President and to the Congress by the Public Land Law</u> <u>Review Commission</u> (Washington, D.C.: Government Printing Office, 1970).

ACR: No knowledge.

- ERM: Not at any time while you were actively involved did you feel that the group was moving in the direction of taking sides in an issue?
- ACR: Not that I'm aware of.
- ERM: In 1949, while I believe you were still active in the group, there was some objection within the Council to Carl Shoemaker's approach to conservation news and Shoemaker was asked to cease editorializing the Conservation News Service. Do you remember that?
- ACR: Not specifically, no.
- ERM: Can you relate further what you may consider to be some of the Council's other outstanding activities besides providing a news service? You've mentioned the fact that it provided a ready forum for executives of the various groups to meet and exchange thoughts and get better acquainted with one another. Were there any benefits of the Council?
- ACR: I don't think I'm sufficiently informed, and what I would hope very much is that what comes out of the report that you are preparing, is some sort of a listing of the positive actions for which the Council can be considered to be responsible.
- ERM: You mean some kind of chronology?
- ACR: Yes, some sort of chronology of what they have done, what they have done besides legislative reports. For example, recently they have been arranging interviews between their people and members of government. That's the kind of thing they may well have been doing quite sensibly, to arrange with the secretary of commerce, or whomever would be responsible, to discuss the problem of the Alaska pipeline.
- ERM: I think they've made several recent attempts to get a direct line of communication with the White House.
- ACR: Yes, I know they have. I've seen copies of letters which they have sent to the president. They would appreciate very much a chance to discuss with him or a representative such and such a problem. That sort of thing would do more to evaluate what is going on than anything else I can think of.
- ERM: You have been privy to all of the publications and reports of this

Council over the years as an active member and an officer and now an honorary member who has received all of the literature. How closely have you followed this through the years? Have you regularly read the publications as they have come to you?

- ACR: Not very regularly. The trouble is, there's so much to read, and in these reports there is so much filling in, that so and so moved that the minutes be approved, that kind of stuff, that you don't really learn very much of what it's all about. And occasionally there is a resolution that they do this or that, and I'm sure there's some resolution that they prepare this history or that they may write to the president asking for a hearing, that kind of a thing. Sometimes I read it, sometimes I don't.
- ERM: Have you maintained a file of these materials?
- ACR: No I haven't.
- ERM: Then you discard them?
- ACR: Yes.
- ERM: Is this your full NRC file?
- ACR: Yes, these are the memberships of 1973. I've thrown away the preceding ones. I have a copy of the by-laws.
- ERM: You preserved nothing of your own files that were created in the early days when you were more active?
- ACR: No, I'm afraid not.
- ERM: All of that is gone. What do you see as the present condition of the Council and perhaps the need for its continuance? Is it something you feel is of continuing worth?
- ACR: Well, my only judgment for that is the fact that it has continued since 1947, twenty-five years, and it seems to be continuing without abatement. The numbers of members have increased. I don't think that would be true if it had been a futile effort.
- ERM: In other words, it does justify its existance?
- ACR: It seems to have, at least on the part of the people who have put the effort into it, and they're not a lot of idle people.

- ERM: Do you have any idea as to the attitude of the scientific community today with regard to the Council?
- ACR: I don't think they have an attitude.
- ERM: In other words, they're not really deeply concerned.
- ACR: No.
- ERM: What would you have to say about their attitude toward the use of their knowledge and of their accumulation of published knowledge relative to some of these matters of high concern? Is it any different now than in your day?
- ACR: I don't think so. I think scientists have always felt that if their findings were useful, so much the better.
- ERM: But are they satisfied in the scientific community with this filtering down process of public awareness of their more recent work so that it becomes more applied? Is there any feeling of lack of real communication there?
- ACR: I don't think so. I've expressed the idea that perhaps the societies were not using the knowledge as fully as they could. That is more or less inherent in the complexity of the knowledge.
- ERM: And of the language in which the knowledge is originally set down.
- ACR: To a certain extent, although the language in which this kind of knowledge is set down is pretty simple. It isn't like molecular chemistry where a lot of fancy terms have had to be developed in order to deal with a situation.
- ERM: In areas of oceanography, limnology, and ecology you feel that the nomenclature of the experts is not a serious barrier.
- ACR: I don't think it's a serious barrier. Of course, we all use fancy words where we could sometimes use a simple word. Sometimes we talk about austausch coefficients which merely means the rate in which water is mixing, you see. But austausch coefficients are defined accurately in terms of certain numbers that have to be measured or could be measured. The word austausch, I think, is German for exchange.
- ERM: Yes, but which might baffle the unscientific mind.
- ACR: Yes. You use the word, mixing, it would be simpler. I have here two

or three items which I don't know whether you'd like copies of. Here is a letter written in 1967 to Fred Hornaday of the American Forestry Association. * I have written some recollections of the events which led up to the organization of the Council which might be of interest to you. In the letter I also say more or less what I've told you.

Then I have an acknowledgment from Charles Foster (who was then of The Nature Conservancy) to whom I sent a copy of this letter. "He acknowledges and said that I was right, "...that the group of scientists from the Ecological Society did end up launching a new organization, now known as The Nature Conservancy."

There is also a letter from Richard Pough on the same subject with which he was apparently intimately connected.

** Charles H.W. Foster to Alfred C. Redfield, 31 October 1967. NRCA Papers, Box 10. For a copy of this correspondence, see Appendix E, p. 66.

*** Richard H. Pough to Alfred C. Redfield, 6 November 1967. NRCA Papers, Box 10. For a copy of this correspondence, see Appendix F, p. 67.

^{*}Alfred C. Redfield to Fred E. Hornaday, 20 October 1967. NRCA Papers, Box 10, Forest History Society, Santa Cruz, California. For a copy of this correspondence, see Appendix D, pp. 64-5.

VIEWS ON CONSERVATION

Recent progress

- ERM: You've been an observer of the conservation movement for many years. What would you have to say about that movement's progress in the years that you have observed it? And of its present state?
- ACR: I think the striking thing is the spread of conservation among the people which has occurred in the last fifteen years. I had an interesting experience back in the late thirties. I was asked to give a series of lectures at the Lowell Institute [Lowell Technological Institute, Lowell, Massachusetts]. It was a great honor for a young man to be asked to give these lectures. I chose as my subject, the sea as an environmental system, or words to that effect. The interesting thing was that I used the word "system" and now system is in everything.

I learned about systems from Lawrence Henderson who was a chemist and who had been working on the blood as a physical chemical system. I learned a lot of the technique of how you handle that sort of thing, which I've actually recently been using in studying tidal phenomena, by treating it as a system and using nomograms to trace out the relations. What I did was to consider the ocean as a system and show what the various factors were that make it the way it is.

Among other things, I thought about the population problem. I realized that obviously we were up against a dead end there; that you couldn't have infinite growth. I also thought about various things which have become commonplace today. But I thought they were so far in advance, so much matters of inference, that I didn't dare say very much about them. My thinking was not highly original, I could have found many obscure publications to support what I thought, but the point was that back in that time, thirty years ago or more, a few scientists were thinking what almost everybody or every educated person thinks they know about today. They teach little kids about conservation in the schools, and they eat it up. What I didn't appreciate was how fast things were happening. The great thing is that the public is becoming aware that conservation is a practical matter and so you have in nearly every town in Massachusetts a town conservation commission which is working on the conservation problems of the local town and that is spreading at least as far as New Jersey. I don't know how far in other directions. There's this great change in the public attitude toward the relation of man to nature that is very encouraging. If occasionally the conservationists are a little enthusiastic, as I think they undoubtedly are in a few cases, that's all right.

- ERM: Do you see this as a result of the decline in the influence of the Puritan ethic? Are we getting away from the concept of the old biblical idea that God put man in charge of nature and he was going to run it his own way and make the most of it?
- ACR: Well, I suppose that's true.
- ERM: Is this, perhaps, related to the decline in the influence of organized religion in our society?
- ACR: Well, of course that ethic had its origin in this country right here in New England, and I suspect that this conservation movement to a certain extent has also originated here, aided and abetted by California, which is merely New England gone west. The reason that you have a strong Sierra Club and a strong Appalachian Mountain Club is because of the kind of a populace you have east and west and you can't expect that same sort of thing perhaps in Kansas.
- ERM: It's beginning to grow in the midwest.
- ACR: Oh yes. It will grow.

Future prospects

ERM: What would you hope might be the development in the conservation movement in the near future? How would you like to see the conservation movement mature? What directions would you like to see



Natural Resources Council of America Organization Meeting, Mammoth Cave, Kentucky, October 25 and 26, 1946. Standing left to right, Ollie E. Fink, Friends of the Land; Charles G. Woodbury, National Parks Association; Howard C. Zahniser, Wilderness Society; Dorothy M. Hill, Sierra Club; Charles C. Adams, Ecological Society of America; Harry E. Radcliffe, American Nature Association; Alfred C. Redfield, Woods Hole Oceanographic Institute; C. R. Gutermuth, Wildlife Management Institute; Kenneth A. Reid, Izaak Walton League of America; Carl W. Buchheister, National Audubon Society. Seated left to right, Henry Clepper, Society of American Foresters; Carl D. Shoemaker, National Wildlife Federation; and Arthur C. McFarlan, Geological Society of America. it take or hope to see it take?

- ACR: I hope that it will result in strengthening the belief in the importance of the natural environment, in the importance of a resource which we are despoiling. That's a thing we feel at once. Our problem in this area is that there are too many developments going on. You will find that our townspeople are taking that seriously. The planning boards are trying to figure some way that they can discourage these developments.
- ERM: That involves, does it not, a rather substantial shift in a declaration and adherance to values in our society?
- ACR: Yes. It's the decline of the universal belief in the importance of growth. In other words, twenty-five years ago if you went down Main Street in Falmouth and talked to the merchants, they would all feel that everything which could increase the size of the town would increase their personal business. Now they are beginning to question that. Possibly it's because they realize the growth has been largely because entrepreneurs from off the Cape have come onto the Cape to compete with the Cape people, and they realize they don't always turn out so well in that competition. There is a feeling against the developers, who are essentially capitalists from the cities who come here and buy up cheap land and develop it so that it becomes expensive land. That's fine for a while, because all the carpenters are busy building houses, but then the children have to go to school and the town will lose money on that, so that the general concept of economic values I think is shifting and, of course, it's in terms of that that conservation will really accomplish something.

Scientific input into conservation practice

- ERM: What would you hope for in terms of a more meaningful relationship between the community of scholars and the general mainstream of conservation?
- ACR: I think that as a scientist I'm very much concerned that what I discover is correct. In other words, that it is based on observations which are consistent, reproducible and reliable. Let me introduce an example, which is the most important thing I've ever done in

science. I realize that organisms are made pretty much of the same stuff irrespective of species or whatnot. At least in a statistical sense that is true. If you go out and tow a net in the ocean, whether it is the Atlantic or the Pacific, and catch all of the little things which are there, forgetting about the two or three fish that escape the net, and you concentrate and dry them and analyze them, you will find that they contain about 50 percent carbon, 15 percent nitrogen, and a few percent phosporous. That is essentially what living matter is made of. It may differ in this bug or that, but you take a marine population as a whole, and populations as a whole are pretty much alike statistically, you get analyses of these things sufficient to show that this is true, that these numbers really mean something, that these are the proportions in which organisms are made.

But where do they get this material? Obviously they get it out of the sea waters that they grow in. Each organism starts as a little cell and grows into a big thing by absorbing and retaining these particular elements in these particular proportions. It should be that if organisms grow in seawater, these three elements should disappear in just those proportions. If organisms die and decompose in the deep sea where there is no light and no growth, these materials would enrich the seawater in the same proportions. These are mere inferences, so I make collections of seawater in different places in the ocean and I find that they are true with reasonable accuracy.

Now, what does this mean? It has something to do, you see, with some practical problems. Suppose you dump sewage into the ocean. One of these elements will be enriched much more than another and the whole situation will change. For example, down in Great South Bay there are a lot of duck farms where they feed the ducks a lot of bone meal to produce the eggs and the bones for the growing ducks. They greatly increase the amount of phosphorous, but they don't increase the nitrogen, so the proportions in the bay water which the ducks pollute change very much. You can argue from such information how the pollution of the bay might be prevented.

I have not considered it particularly my duty to put forward the practical aspect of this knowledge. I've been much more concerned with the general implications of these original observations; and what is the very fundamental relation between these elements and the productivity of the sea. I think that what I'm trying to suggest is that as a scientist I'm not expected, until called for some explicit way, to use my special knowledge. As a scientist I should be, in general, intelligent about what is known about the ocean, and what makes it do this and do that. So I think the role of a scientist in the social complex is to be intelligent in his own field and a little beyond his highly special field, since every highly specialized person has to have a good bit of peripheral knowledge. It is the responsibility of those who alter the natural environment to consider what will result in view of existing scientific information. They can easily get the available information if they want it. I don't know if that's futile or simply self defense.

- ERM: You have in your pursuit of that knowledge made intensive studies of the life of the marsh and its development, and you have told me that contrary to what you have seen frequently bandied about by certain groups, a salt marsh is created usually in a considerably shorter span of time than that which has been generally told to the general public. What is the responsibility of the knowledgeable scientist who has discovered other than what is being parroted to the public on this subject? Does he feel a responsibility on his own initiative to shoot down these false ideas that are being spread, rather than waiting perhaps to be called to a public hearing or to a town meeting where he can deny these things?
- ACR: I thought that was not his responsibility. At least I've acted that way. I've been called several times to be a witness for the state in litigation with regard to the wetlands laws. I was on one case where a man, without getting any permit, scraped all the surface off a marsh in front of his place in order to create a bathing beach. He was ordered to desist, and I think he was also ordered to replace what he'd taken away. Well, I was able to say, "If he will replace the sand very rapidly, the grass will grow back."

In another case a man had dug a canal big enough for a boat to go through and the only way he could replace that marsh would be to fill the whole canal with sand. As an expert witness, I was able to do a public service. I'm sure the paper that I wrote, in which I explained how fast a marsh developed under various circumstances, is probably available to almost everybody in the world interested seriously in marshes.* They will have the information available and when they become expert witnesses in their particular locations, the thing will get corrected.

^{*}Alfred C. Redfield, "Development of a New England Salt Marsh," <u>Ecological Monographs</u>, 42, no. 2 (Spring 1972): 201.

PERSONAL INVOLVEMENT WITH FALMOUTH, MASSACHUSETTS

Community government

- ERM: Dr. Redfield, I have a few questions that I'd like you to answer, because bits of information came up in the course of our conversation when we weren't on the tape recorder, and I'd like to get that information down. First of all, you told me of your activities here in the town of Falmouth with regard to the work that you'd done with the town council, I believe. How were you connected with that?
- ACR: We have a representative town meeting in Falmouth. About two or three hundred representatives are elected by the general voters to act in town meetings.
- ERM: You still have selectmen who are elected?
- ACR: Yes.
- ERM: In addition, there are three hundred representatives of the community who are privileged to attend town meetings?
- ACR: Yes. Traditionally the New England town is governed by all the voters who were originally all of the members of the church, of course. They meet periodically, at least once a year, and they vote all town expenditures and other town acts, regulations, and so on.
- ERM: From this group of three hundred is also drawn, I presume, the various committees and commissions of the town.
- ACR: Yes, but not necessarily. It is not limited to these people. Anybody could be a selectman, as a matter of fact, or could be a member of the finance committee, who is not a town meeting member. You are elected a town meeting member and elected or appointed to other committees. In general, it is not obligatory that you be a town meeting member in order to serve upon a committee.

My first contact with town government was when I became a town meeting member to fill a vacancy which had arisen through a resignation. When that happens, the town meeting members from the district--there are four or five districts into which the town is divided and Woods Hole is one of these--select a replacement. I was not elected in general election, which is the ordinary method.

- ERM: Were you subsequently elected in other years?
- ACR: Yes. You serve a three-year term and then come up for reelection.
- ERM: Does this follow political party lines?
- ACR: No. There's no party designation within the town government.
- ERM: Your experience in local government began about what year?
- ACR: I would think approximately 1950.
- ERM: How long did you serve?
- ACR: I'm trying to think why I resigned. It must have been in 1965 or 1966 when I retired from the Oceanographic Institution and went out to California for a year. I felt that inasmuch as I was not going to be here for a year, it was not proper to remain a member. I was a member of the town meeting for fifteen or sixteen years.
- ERM: In that time you served in various capacities on various committees of the town. What were some that related especially to conservation?
- ACR: The first one was the town forest committee.
- ERM: What was the town forest committee's purpose?
- ACR: It was to conduct the town forest. The town forest was constituted from what was originally a town woodlot where the citizens of the town could cut their firewood, presumably the indigent citizens. It was of something like forty acres. It adjoined a large amount of land subsequently taken to protect a lake, which became the town's water supply. This land was actually under the jurisdiction of the town water department, but the management of the woodland was turned over to the town forest committee.
- ERM: Has there been a town forest committee for many years, or is this a relatively new thing?

- ACR: I don't know just when it began. Probably in the thirties the town forest was first actively developed using funds which were available during the depression.
- ERM: There are tree wardens in the town, too. What are their roles?
- ACR: The tree warden is an elected official and his responsibilities are trees which grow along the town roads. He sprays them, cuts them down if they need cutting down, trims them off if they're in the way. I presume that it is quite an old office. There must have been a need for it almost as soon as they had roads.
- ERM: Trees that grow along the roadways of the town are never cut down except with the permission of the tree warden, is that right?
- ACR: I would think that is a fair statement. I don't know the exact rules about it.
- ERM: What other positions did you occupy as a member of the civic governing group?
- ACR: I might add that the forest committee went out of existence with a town reorganization at which a department of public works was established. There had been a road commissioner and there had been the town forest and various things of that sort were all lumped into one department of public works, so the town forest committee was no longer needed.

The other committee which I served on was the town finance committee. It is nominated by a committee appointed by the town moderator each year and then is formally elected by the town meeting. But it is essentially an appointed committee. You serve for three years, if I remember correctly, and may be reelected. Its members are supposedly fifteen wise citizens who review the town warrant.

The town warrant is a list of all the proposals which are made for town action. The selectmen make proposals; they present a budget for conducting their affairs. Each committee presents some form of budget. I, as a citizen of the town, with sufficient support in terms of signatures on a petition, might ask the town to pave my driveway with diamonds. Any fool thing may come up. The town finance committee reviews all of these petitions, investigates the problem, and comes up with a recommendation that the town grant it or dispose of in one way or another. They also recommend how much money they think the town should vote for each purpose. It is a very important thing, you see. It centralizes the study of the town's actions without putting authority on a single group such as the selectmen, a town manager, or what have you. It's quite general in New England.

- ERM: How important have the local citizens considered their forest to be? Have they shown their interest in concrete ways by approving generous budgets for the care of the forest?
- ACR: I would think yes. What the forest committee worried about was the finance committee. Can you get away with this appeal with the finance committee? Because they will look at it critically in relation to everything else. Their pressures are to keep the costs down. I think I told you how when in the early fifties I spoke in opposition to the recommendation of the finance committee and appealed for the appropriation of a thousand dollars to experiment with DDT to control the gipsy moth, I got unanimous support from the town meeting because all over the hall there were tree lovers that rose in my support. That whole attitude is much stronger today than it was at that time because of the general propaganda for conservation.

A few years ago, I suppose it must be nearly ten years ago now, legislation was passed permitting towns to appoint conservation commissions. I was not appointed to the original commission but to fill the first vacancy which arose. I must have served on that committee about eight years.

- ERM: What is the function of the conservation commission? Is this a group that can appeal to the state for matching funds?
- ACR: Oh yes, it has rather wide powers defined by the state law. Its chief power is to acquire natural areas for the town, and to protect such areas by the enforcement of such laws that exist for the protection of nature. We had originally the Jones Act, which was designed to protect salt marshes, and it was broadened by the Hatch Act that extended protection to fresh water wetlands, and then these two were finally combined.^{*} There is a body of state legislation which defines what you can do to certain kinds of land. Usually before you indulge in certain types of activities, a public hearing is required before a town or state body that grants permission

^{*}Jones Act of 1963, Massachusetts General Laws, ch. 130, sec. 27A; Hatch Act of 1965, Massachusetts General Laws, ch.131, sec. 117c; Wetlands Protection Act of 1968, Massachusetts General Laws, ch. 131, sec. 40.

at its discretion. In other words, these laws do not say you cannot dredge a salt marsh, they say you must get the approval of such and such authorities before you do it. This is wise, you see, because you cannot make an absolute law which is just.

- ERM: Was this a busy commission during the years in which you were a member?
- ACR: Yes, it has become increasingly so.
- ERM: Did it impose considerably upon your time to attend hearings and meetings?
- ACR: Yes, you have to attend hearings. You have to inspect property. According to the law going back to colonial times, ponds of a certain size are called great ponds and are state property rather than private property. You can own down to the shore but you cannot control the pond. From colonial times the public has had the right of access to such ponds for fishing and things of that sort. As time has gone on, this access has been closed off by the private people surrounding the ponds. So the first thing we did was to find reasonable access to each of these ponds and have the town take land or acquire it in one way or another so as to make these ponds accessible again.

Next we found that we were a very important source of information, that a man wishing to do something to a salt marsh in front of his cottage could come to us and ask, "What do I have to do about this? What is the law?" We would tell him, "You've got to make such and such applications, file such and such documents with the state and with the town, and have a hearing." We were quite active giving that type of information.

Then we were active in acquiring land to be set aside as reservations. That has gradually increased in importance and there we obtain assistance, if the proposition is a good one, from the state that may pay half the cost. What we have to do is get the town to appropriate for the whole cost, then if the state approves, it will repay half of it. You have to explain that to the town meeting. It's a little iffy if they'll vote this, but they can expect in the end that it will only cost half as much. We've had no turndowns on that sort of thing. Last night I could have shown you one of the tracts we looked into first.

There's a river that comes from a pond that practically divides the town into two parts. Its valley is occupied very extensively by

cranberry bogs. It would make a natural greenbelt right across the town. At first we found that there were so many owners we didn't think it was practical to try to secure it, and then two or three years ago a cranberry company from off the Cape, which was operating part of this tract, let it be known that it would like to dispose of this property; that it was concentrating its activities closer to home. We finally purchased the whole thing for something like eighty thousand dollars. The town ultimately got half of it back from the state, and we secured about half of this valley all in just one purchase. Then the owners of a substantial part of the other half thought they might like to dispose of it, and we are now negotiating for its purchase.*

- ERM: And the cranberries that grow there are harvested on contract?
- ACR: That's what we've arranged. If we did nothing with it, the bog would just grow up to become one more bushy swamp. We found a local fellow who is an experienced cranberry grower and have leased the right to the cranberries to him for a period of five or ten years. He's putting in irrigation systems and all those necessary things.
- ERM: It will pay itself off.
- ACR: It will pay off because we get a fraction of the annual crop, you see.

Redfield's home

- ERM: Let me ask you again a little about the history of this community and this particular land on which you built this house. You told me something about the original landowner and how he imported trees from abroad.
- ACR: The original land was a farm. It was the home of Ward M. Parker. The picture I have of it shows it as it appeared in 1831 when it was owned by Ephraim Manassah Swift. Swift is an old Cape name going way back. Later it became the property of Ward M. Parker. It was

*The town meeting has since approved this purchase.

sold in about 1850 to Joseph S. Fay, and he and his heirs were the last owners until I came into the picture.

- ERM: These drawings and pictures would indicate that the area around here was almost bare of any vegetation, any trees. What happened? Who introduced the present verdure that we see all around us? This is a very lushly vegetated place now.
- ACR: Well, in 1850 Joseph Fay, who was a successful Boston merchant, bought this property. It was an extensive farm and he made the farmhouse into his summer residence. He was interested in horticulture and he proceeded to plant nursery stock, which I presume is the source of the copper beeches, the hackberries, and some of the trees not native to the Cape which are hereabout. There is also a large vegillia, a southern tree, the remains of which are here.

Fay found it rather costly to purchase nursery stock, so he sent to England and imported a thousand seedling trees, and they evidently gave rise to the English elm, the English white oak, the sycamore maple, and the European linden, which are now the common weed trees in this immediate area. He also used to scatter tree seeds in the abandoned sheep pastures which had been left on this farm, which account for the Scotch pines and others in the local woodlands.

- ERM: In early colonial times this was a sheep raising area.
- ACR: Primarily. He has stated in a paper which I have read, that there were practically no trees in the Woods Hole area except for the steep hillside which is just behind this house, which apparently had never been cleared. It was too steep to be useful for agriculture. It was a northern exposure so they just left it. That's the story, very briefly, of this particular property and the area surrounding it.

Matthew Fontaine Maury

- ERM: Who was the man for which your street is named?
- ACR: I named the street for Matthew Fontaine Maury who was--I may not have the title correct--chief of the naval observatory in the

Department of the Navy that was concerned with the art of navigation. At the observatory I suppose he was responsible for getting information on the positions of the stars on appropriate dates for use in navigation. He was, to my mind, certainly the first professional American oceanographer. He conceived of the idea of collecting the daily records from ship logs on what the wind was doing in all parts of the ocean, and reducing this to charts which showed the strength and direction of the prevailing winds throughout the ocean. From this one could determine the most economical course for a ship to go from one position to another. That was a tremendously important thing because the whole economy of a ship was tied up to the time it took to get there. A sailing ship took a long time and if you didn't go where the wind was favorable, you were out of luck. So he was a very important person really.

- ERM: He was a pioneer in oceanography, in your view?
- ACR: He was a pioneer in meteorology and oceanography.
- ERM: He lived during what time?
- ACR: His career terminated with the Civil War [War Between the States], when, I suppose, he was less than fifty. He was a naval officer, a southerner. And he went with the South in the Civil War. Of course, that cut off his future.

The lane was actually called Cow Lane as a survival of the farm. The reason I named it Maury Lane was that many new streets around Woods Hole have been named after biologists and some of them really are not very distinguished. They were good members of the community but they were not names which will be perpetuated in science, with a few exceptions. I thought it would be rather nice to have a street named after a really distinguished oceanographer.

- ERM: How did you get the change actually made? Did you have to petition the town?
- ACR: No, I put up a sign. The town periodically regulates these things, because the fire department has to know where the streets are and they have got to be sure that there aren't two streets with the same name, which could quite easily happen. I never petitioned. I just put up a sign and called it Maury Lane.

Michael Walsh

- ERM: You told me the story of another person who is very important to this particular plot of ground, the gardener who developed the rambler rose.
- ACR: Michael Walsh.
- ERM: And he came here when?
- ACR: He must have come here as a gardener for Mr. Fay. I presume he was originally an Irishman. I suspect he came from the old country, because I think that was where they trained people to be expert horticulturists; either there or in England.
- ERM: While he was here he developed a great many varieties of roses.
- ACR: Yes, many varieties; he had an extensive garden, right here in front of you, which used to be plowed up and planted with rows and rows of roses he was experimenting with. They were crosses he made and sports that he selected and whatnot. What he did that was most significant was to develop the rambler rose. I suppose the trick was to get a rose which had a very long stem and would climb up over things.
- ERM: I note that he is honored with a marker down at the foot of the street.
- ACR: Yes. If you glance at that as you go by, you will find some information about him. He lived in the little house just beyond the gate.
- ERM: The former landowner, Fay, is the man who went around scattering tree seeds.
- ACR: Yes. His grandson told me that as a small boy he'd go driving with his grandfather and they'd ride around through the old pastures, which were then treeless; the old man would just stop, reach in his pocket for seeds and scatter them about.
- ERM: And the clear evidences of this can be seen today.
- ACR: Yes.

Hobbies and other interests

- ERM: I wanted to ask you about your other special interests. You have always been rather keenly interested in boats and boat building. Can you tell me a little bit about your initial interest in this and in carpentry, and how it was developed?
- ACR: My father was a very good carpenter. It was just an avocation. He wasn't a professional, but he had a good set of tools and he knew how to use them much better than I ever did. I still have some of his tools. He was in the car wheel manufacturing business. There was a man named Asa Whitney, who was my greatgrandfather. His daughter married the man who was my grandfather. This goes back on the maternal line of my ancestry.
- ERM: Was this Whitney any relation to Eli Whitney?
- ACR: Not so far as I know. He was active in the development of railroads and that sort of thing; Whitney and Nathanial Baldwin of the Baldwin locomotive were partners. Whitney didn't like Baldwin's way of doing business, so they dissolved the partnership and divided the business. Whitney made the wheels and Baldwin made engines.

The Whitney car wheel factory in Philadelphia was quite successful until competition developed from a man named Griffin, who came over from Ireland. He worked at and eventually owned a foundary in Buffalo, New York which made steam rollers and car wheels.

- ERM: These were railroad car wheels, I take it?
- ACR: Yes. The important thing was that Whitney developed a steel car wheel, which made it possible for the trains to go about twice as fast. But Griffin made a stronger wheel by centrifuging it when casting. I think it must have been the financial crisis of 1907 which actually put both companies out of business. My father, who was of middle age at the time, had been working for the Whitney company, was out of a job, and never took another job. He had enough money so that he could live comfortably and devoted himself to his hobbies, which were photography at which he was very good, and carpentry. Incidentally, my sister married the heir apparent to the Griffin company. Their son Donald Redfield Griffin is now a professor at Rockefeller University.

The family used to move from Philadelphia up to Cape Cod every summer. I can remember that my father had a collection of about a dozen beautifully made wooden boxes, with lids that screwed on. In these he could pack all of his gear, photographic and carpentry, and transport it back and forth each year.

- ERM: You learned a good deal of the art of carpentry by watching him, I presume?
- ACR: Yes. I was interested in boats and sailing as early as I possibly could have been, and when I got old enough, he got me a twentytwo rifle, and then later, a shotgun. I became interested in shooting ducks and you shoot ducks out of a boat. So one day he and I undertook to build a boat. I, being the naval architect, knew what a duck boat should be like, and he knew how to put it together. That was my beginning, watching him build this boat to my designs. It wasn't until much later when I had small children and I was working at Woods Hole, that I thought it would be fun to build a boat. I got some plans and built what is known as a snipe, which is a very popular little sailboat.
- ERM: Did you build other boats?
- ACR: I only built one more. It was a plywood sailing dinghy. I used it as a tender for a thirty-foot cruising boat which one of my friends and I had built. It was just right for the children to learn to sail in. That was the extent of my boat building.
- ERM: I see all around me in your home that you've also had a keen interest in painting, particularly in watercolors.
- ACR: Yes.
- ERM: When did this interest develop?
- ACR: Well, in a way I think the stimulation came unconsciously from my sister. I had an older sister who became a successful professional artist. She was well trained and was a very skillful miniature painter. As a small boy, I used to see her painting watercolors and so I was brought up with the idea that you painted with watercolors. I always had some facility in drawing and that was a great advantage in my training as a zoologist, which was very largely a question of anatomical drawing. I'm sure my grades went up at least one grade just because it was easy for me to draw.

But it wasn't until Martha and I were married in 1922 when we came

down here to spend our first summer together that I took up painting. Martha had had professional training in painting. She'd gone to schools with good, professional artists and knew a lot about painting. She brought along some watercolors, but she was so overcome by the duties of the kitchen, which she was learning for the first time, that she didn't do any painting. I took the watercolors and started painting what I saw while I was waiting for her to cook my dinner.

And I likedit and enjoyed it and progressed so that in two or three years I wondered how good I was. Because of my sister's previous contact with the Philadelphia Academy of Fine Arts, there came one day a notice that they were having a watercolor exhibition, which would be a jury show. I knew that the jury would be conservative. I sent two of my pictures to see if I could get by a jury, and by gosh, they were both accepted. Since then I've had no desire to exhibit whatsoever. But I had found that I could get by an ordinary, critical, conservative jury.

- ERM: And you never had any shows, never exhibited your work?
- ACR: Oh, I sent one or two things like these to some of the local art associations. We have one in Falmouth, and there's one in Hyannis. Painting is a great resource. You can't think about your troubles and paint a watercolor at the same time, I can tell you that. It requires complete concentration. You have to do it fast and you have to do it right. You can't erase. And it doesn't cost very much to throw them away at the end of the hour. You can't waste more than an hour or two on any one picture.
- ERM: This watercolor in back of me on the wall was done one night, I understand, when you were feeling very frustrated. Would you tell that story?
- ACR: Well, I was doing scientific work for the navy and I used to get very much annoyed with the man I was working under in Washington. He's still my very good friend.
- ERM: Would you care to name him?
- ACR: No, I don't trust you.
- ERM: Well, I'm sure I wouldn't have too much difficulty tracking him down.

- ACR: He became one of the directors of the Scripps Institution of Oceanography; you can find out from that. At that time, I'd felt that, having asked me to make certain reports on certain subjects, he should accept what I gave him, but he wanted to fix them up. I didn't like that, so I used to feel very much frustrated and get up in the middle of the night and turn on the lights (as you know, the colors do not look the same under an electric light as they do under natural light) and paint these pictures. They had to be very simple of course, because I was doing them out of my head. As a matter of fact, you have to do a picture of a boat out of your head unless it's tied up to a wharf or something. They don't sit still long enough. What you do is paint with your knowledge of what a boat is like and your knowledge of what the pigments that you have will do as you mix them.
- ERM: It has been a great relief from the tensions of other things in life, to involve yourself in painting, has it not? In other words, it's been a hobby in a way, but more than that.
- ACR: More than that. I suppose it's like the game of squash to the busy executive. He can't play squash and think about the contract maybe he shouldn't sign at the same time.

Conclusion

- ERM: This has been a most useful and instructive interview. I've enjoyed it very much and I hope that you may have too, Dr. Redfield.
- ACR: Yes, I have. It's been very good fun. You must realize how my memory has failed me.
- ERM: You're certainly no different in that regard from the rest of us. I'd like to express my own personal thanks to you, not only for your kindness in sitting through a long interview but also for the very wonderful hospitality that you and your wife have extended to me and my wife, Elly.
- ACR: It was a great pleasure. We don't get around as much as we used to, so it's always a pleasure to have somebody come here.

- ERM: We will have to say a word to your old Friend Ken Thimann when we get back to Santa Cruz, and I think I expressed to you yesterday his greeting which he asked me to pass on to you. *
- ACR: Yes. That's very nice.

^{*}Kenneth V. Thimann, Professor Emeritus of Biological Sciences, University of California, Santa Cruz.



Elwood R. Maunder and Dr. Alfred C. Redfield in the Redfield garden, July 1973, Woods Hole, Massachusetts.

APPENDICES

Natural Resources Council of America Chairmen, 1946 to 1974 *

Ecological Society of America

Society of American Foresters

Conservation Foundation

Sierra Club

Izaak Walton League of America

American Forestry Association

National Wildlife Federation

Wildlife Management Institute

National Wildlife Federation

American Forestry Association

Izaak Walton League of America

Conservation Foundation

National Audubon Society

Yale University Conservation Program

Wilderness Society

- 1946-1948 Alfred C. Redfield
- 1948-1949 Howard Zahniser
- 1949-1950 Paul B. Sears
- 1950-1951 Henry Clepper
- 1951-1953 William Voigt, Jr.
- 1953-1954 Samuel H. Ordway, Jr.
- 1954-1955 Lowell Besley
- 1955-1957 David R. Brower
- 1957-1959 Charles H. Callison
- 1959-1961 C. R. Gutermuth
- 1961-1962 Roger D. Hale
- 1962-1964 Thomas L. Kimball
- 1964-1966 Carl W. Buchheister
- 1966-1967 Fred E. Hornaday
- 1967-1969 Joseph W. Penfold
- 1969-1971 Richard H. Stroud Sport Fishing Institute
- 1971–1973 Gordon K. Zimmerman National Association of Conservation Districts
- 1973-1974 Daniel A. Poole Wildlife Management Institute

 * Organizations listed are those the chairmen were members of at the time of office.

APPENDIX A

MEMBERS AND OBSERVERS AT THE ORGANIZATION MEETING OF <u>NATURAL RESOURCES COUNCIL OF AMERICA</u> <u>October 25th and 26th, 1946</u>

Representatives and Organizations Composing Council

Dr. Charles C. Adams	149 Manning Boulevard, Albany, New York
Mr. Carl M. Buchheister	National Audubon Society 1000 Fifth Avenue, New York, New York
Mr. Ollie E. Fink	Friends of the Land, 1368 N. High St., Columbus, Ohio.
Mr. C. H. Gutermuth	Wildlife Management Institute 822 Investment Building, Washington 5, D. C.
	American Wildlife Foundation Investment Building, Washington 5, D. C.
Mr. Harry E. Radcliffe	Vice. Pres American Nature Association 1214 - 16th St., N. W., Wash. 6, D. C.
Mr. Alfred C. Redfield	(Woods Hole Oceanographic Institute Woods Hole, Massachusetts)
er 18 ee 82	The Ecological Society of America and
" " " "	The Limnological Society
Mr. Kenneth A. Reid-	Izaak Walton League of America 31 N. State Street, Chicago, Illinois
Mr. Carl D. Shoemaker	National Wildlife Federation 5394 Earlston Drive, N. W., Wash., 10, D. C.
Mr. Charles G. Woodbury	National Parks Association 1214 - 16th Street, N. W., Washington 6, D. C.
Mr. Howard Zahniser	The Wilderness Society 1840 Mintwood Place, N. W. Washington 9 , D. C.
** **	(also observer for Outdoor Writers' Ass'n of America)
The following persons were present as observers and invited to membership	
Mr. Henry Clepper	Exec. Secretary, Society of American Foresters 825 Mills Building, Washington 6, D. C.
Miss Dorothy M. Hill Berkeley, California	The Sierra Club of California 1050 Mills Tower, San Francisco, California
Mr. Arthur C. McFarlan	Lexington, Kentucky - representing Geological Society of America

-- American Planning and Civic Association 901 Union Trust Building, Washington, D. C.

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Mr. Tom Wallace

Louisville Times

Louisville, Kentucky

APPENDIX B

6) panaont Ru., Columbus 14, Ohio Tob. 8, 1963

Mr. J.W.Penfold, Secy N.R.C.A. 322 Bond Bldg., Washington 5, D.C. Dear Joe:

The withdrawal of the A.S.L.O. from the N.R.C.A. was doubtless based upon the report I made, after the meetings at Lake Placid, but I had not known of the action until your letter came. I am copying my report to them, so you will know my thinking on the subject. Copy:

Dear Dr. Pennak:

Your recent note in re my service as representative of the ASLO awaited my return from the annual meeting of the Natural Resources Council, at Lake Placid, New York. My attendance at this meeting cost me, personally, about (200. Certain other meetings have cost me more, and some would have cost so much that I have not gone to them. The next meeting is scheduled to be held at Detroit, and this is close enough to Ohio to permit me to attend it at low cost. I would like to do this.

The continuation of membership in the NRC by the ASLO should be given serious consideration for the following reasons:

1. The NRC was organized to bring together representatives of such groups of crusaders as the Sierra Club, the Izaac Malton League, the Mature Conservancy, and especially such organizations as the Mildlife Federation, the Wildlife Institute, the Sports Fishing Institute, the Mational Parks Association, the Soil Conservation Society, and the Society of American Foresters, which "front" for the corresponding branches of the federal services.

2. The principal, and almost sole, function of the NRC has been the financing of listing of bills before congress under the headings of "legislative news service", and of executive orders under the title of "executive news service".

3. Organizations of scientists, such as the ASLO, the American Fisheries society, the Wildlife Society, the Ecological Society, and a few others, were invited to join the IRC, and the reason cited was to enable the propagandists to have access to authoritative statements about whatever conservation problems might arise. The real reason was to lengthen the list of people who might bring pressures, pro or con, as suggested by the crusaders, on congressmen or other officials connected with specific proposals.

4. Our organization has been represented more times at the meetings of the MRC than any other group of scientists, but not once have I been asked to have our group supply information needed by the MRC. Mrs. Langlois and I played hosts to the MRC at their meeting in October, 1951, and I presented an unasked for report on Jake Erie. The MRC made no use of the facts then handed them, nor did any of the organizations with delegates at that meeting. Council received a report from Mreyer, of the Ecological Society, and this report has been returned to Dreyer, a year later, with a request for a much simplified condensation. The MMC's Scientific Committee consists of Dr. Edward Graham, now busy with problems of administration, Pavid Brower, propagandist of the Sierra Club, and Dr. Wm. Dreyer, the one functionin scientist on the committee.

5. The issuance of news releases duplicates a service being rendered by the National Wildlife Federation. Any of us, or anyone else, might get these same news releases simply by writing for them. The 'utility of this activity of the NRC was expressed at the recent meetings by the statement that "It wont hurt anybody, and it gives the NRC) a sense of function." I commetnted then that this was a good reason for stopping such a useless gesture.

Hany of the members of the IRC are old friends of ours, so we have enjoyed the annual reunion, and the meetings have led to our visiting some interesting places, but I have told the group on numerous occasions that I think the IRC lacks any real basis for existence, and I have so stated on earlier reports to the ASLO. I think

APPENDIX C

the ASLO might better use its membership fees some other way, but if delegated to represent the ASLO on the NRC for another year, I will be glad to do so. cordially,

Thomas H. Langlois.

It appears now that my comments to the MRC at the Lake Placid meeting were my swan song. I cannot avoid the conclusion that those members of the group who are active crusaders, are, consciously or not, striving to promote causes on the bases of programs which have formulated by federal employees for federal organizations, and, since I have never conceded that federal fisheries workers had any better backgrounds of knowledge, or better abilities to analyze problems, especially those in my bailivick, than local scientists or technicians, I have been a lifelong critic of those agencies. The analysis of the Lake Erie problems which I presented to the NRC in 1951 was quite different from that then being made by federal workerex. Granting that facts gained by a new approach are not readily palatable, the tendency of federal workers to ignore such facts, as they did at that time, even though the facts and the conclusions based upon them were the result of a research program which had cost the State of Ohio a quarter of a million dollars, is not in accord with the spirit of science. Our interpretation of the changes of Lake Erie are now being broadcast by those same workers as if they had had the bright ideas themselves, without credit to Ohio, and to me, for daring to think differently than they had been doing for decades.

Your predecessor with the I.I.A, Ken Reid, expressed the same attitude at a national meeting in Chicago, when I presented the basis for Ohio's opposition to a treaty with Canada for controlling the fisheries of the Great Lakes. I thought then, and still think, that the primary motive of those advocates for regulation was the power to regulate and control, not the management of the fish resource for the most good of the most people. This desire is still uppermost in some of their minds, even though the changes of environment which I then pointed out have practically brought the fishery to its end.

For the NRC to endorse and seek to further such federal programs as may be handed out, rather than to give adequate consideration to the problems themselves, is not sound, to my thinking. Accordingly, I recommended to the ASLO the withdrawal which they have announced. Maybe this makes a crusader of me?

Our sincere affection to Mrs. P. and yourself.

Thomas H. hanglois

FILE GULL

October 20, 1967

Dear Mr. Horniday:

Thank you for sending me Henry Clepper's history of the National Resources Council. I think he has done a very good job.

I have some recollections of the events which led up to the organization of the Council which might be of interest to have on file.

At the time when I became a member of the Executive Committee of the Ecological Society, in 1944, a row had developed over the Society's Committee on Conservation. This committee had developed under the leadership of Victor Shdford. Many members of the Society felt that its activities were not very effective, were irked by its demands for Society funds, and that active agitation was not the proper function of what they thought should be a purely scientific society. The Executive Committee recommended the abolition of the Conservation Committee; a mail ballot among the members was conducted and as a result the committee was abolished.

Charles C. Adams and Robert Griggs were the leaders among the Ecologists in promoting this action, and argued strongly that the Society should affiliate with the conservation groups which were then considering forming the NRC. He⁷ and I, as the President of the Ecological Society, represented the Society at the meeting in St. Louis in March 1946 and at Mammoth Cave in October of that year. I was chosen Chairman of the Council at Mammoth Cave, a choice which I have presumed was due to the fact that I was not a professional and without any special bias toward any of the conservation organizations.

An interesting outcome of the row over the Ecological Society's Conservation Committee was that the members of that committee then

* adam

APPENDIX D

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Mr. Fred E. Horniday - 2 -

formed an independent organization. I did not join this group and had no part in its subsequent history. It is my impression, however, that it became the Nature Conservancy which, after becoming associated with practical-minded laymen, developed into a very effective instrument.

I think Adams and Griggs were right in their appraisal of how the ecologists could best contribute to the cause of conservation.

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10 - C. -

Sincerely yours,

Alfred C. Redfield

ACR/jmb

Copy to Henry Clepper Charles H. W. Foster Richard H. Pough

.



1522 K Street, N.W., Washington, D. C. 20005 202-223-4710

October 31, 1967

Dr. Alfred C. Redfield Woods Hole Oceanographic Institution Woods Hole, Massachusetts 02543

Dear Dr. Redfield:

Your recent letter to Fred Hornaday was greatly appreciated by all of us on the Natural Resources Council and the historical note was most timely indeed.

You were quite correct that the group of scientists from the Ecological Society did end up launching a new organization, now known as The Nature Conservancy.

Our current mix of laymen and scientists seems to have really done the trick!

With best regards,

Itam

Charles H. W. Foster President

CHWF/h

President: CHARLES H. W. FOSTER Washington, D. C.

Chairman of the Board: ALEXANDER B. ADAMS Westport, Connecticut

Vice Chairmen of the Board: GEORGE R. COOLEY Rensselaerville, New York M. GRAHAM NETTING Carnegie Museum Pittsburgh, Pennsylvania

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APPENDIX E



NATURAL AREA COUNCIL

SUITE 6D 145 EAST 52nd STREET, NEW YORK, N.Y. 10022

RICHARD H. POUGH, President

November 6th, 1967

Mr. Alfred C. Redfield Woods Hole Oceanographic Institution Woods Hole, Massachusetts 02543

Dear Alfred:

Thanks for sending me a copy of your letter to Fred Horniday about the early history of the Ecologists Union and Nature Conservancy. Your account conforms to my understanding of what happened. Shelford's group, when thrown out by the Ecological Society of America, reconstituted themselves as the Ecologists Union. My immediate predecessor as its president was Stanley Cain, now Assistant Secretary of the Interior. When I became president and tried to enlist the aid of laymen with a natural history interest I accounted difficulty with the name Ecologists Union and at my suggestion the change of name to The Nature Conservancy was made. I then continued on for several years as president of The Nature Conservancy.

Sorry not to have had a chance to see you this summer. Unfortunately, I wasn't able to spend much time at our place in Chilmark and when I was there I was swamped with things to do around the place.

Sincerely,

Richard H. Pough

RHP:sdr

cc - Fred E. Horniday

APPENDIX F

ADVISORS ON LAND PRESERVATION / COUNSELORS ON IMAGINATIVE PHILANTHROPY

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