RICE UNIVERSITY'S BAKER INSTITUTE FOR PUBLIC POLICY
& SCIENCE HISTORY INSTITUTE

THOMAS E. LOVEJOY III

PCAST

Transcript of an Interview
Conducted by

David J. Caruso and Kenneth M. Evans

via Zoom

on

7 and 30 July 2021

(With Subsequent Corrections and Additions)

Smithsonian Institution Archives, Record Unit 02-096, Box 6, Folder: Contact Sheets: Chancellor/Lovejoy

Thomas E. Lovejoy III

ACKNOWLEDGMENT

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Rice University's Baker Institute for Public Policy and the Science History Institute would like to acknowledge several librarians at the Yale University Archives that assisted in confirming information in this transcript: Lori Bronars, Librarian for Life Sciences, Marx Science and Social Science Library, Yale University Library, Yale University; Bill Landis, Associate Director for Public Services, Manuscripts and Archives, Sterling Memorial Library, Yale University; Barbara Narendra, Senior Museum Assistant, Archives & Meteorites Peabody Museum; and Russell D. "Tim" White, Director of Collections & Research, Yale Peabody Museum of Natural History.

Preliminary Release Form

The Science and Technology Policy Program at Rice University's Baker Institute for Public Policy and the Center for Oral History of the Science History Institute are collaborating on a project to document the history of the President's Council of Advisors on Science and Technology (PCAST) and its membership. As part of this project, researchers from both institutions are conducting oral history interviews that will be archived as part of the Science History Institute's oral history collection, as well as a PCAST-themed digital repository at the Woodson Research Center Special Collections & Archives at Rice University's Fondren Library.

I agree to be interviewed by Kenneth Evans and Kirstin Matthews, representing the Baker Institute, and David Caruso, representing the Science History Institute, starting on July 7, 2021. I understand that my oral history interview will be made part of Rice University's Fondren Library and Science History Institute's collections and will be available for educational, non-commercial use. I also understand that this document is intended to inform me fully of what I am being asked to do and of my rights as an interviewee.

The Oral History Interview

This interview will be recorded within the period of time previously agreed upon by me and the interviewers. Should the interviewers feel that more time is needed to complete the interview, arrangements can be made to extend the interview at my convenience. Once my interview is complete, it will be transcribed and edited for readability in accordance with the Center for Oral History's policies and procedures. I will be given an opportunity to make changes to my interview before the final transcript is completed. No one outside of the Baker Institute Science and Technology Policy Program, Center for Oral History, its affiliates, and interviewers will be able to access my interview until the final transcript is finished. At that time I will have the opportunity to place restrictions on access and reproduction of the interview if I so desire.

My Rights

I understand that I have the right not to answer any of the questions asked of me during the interview should I consider them uncomfortable or inappropriate. If I need to take a break from the interview or if I have a question or point for clarification during the interview, I can ask that the recorder be turned off temporarily. My participation in this interview is completely voluntary and I am free to withdraw consent and cease all participation in this interview at any time without any consequences whatsoever.

Risks, Benefits, and Costs

The Baker Institute and Science History Institute know of no risks or negative consequences associated with participation in this interview. I may not receive any direct benefit from my participation, but I am fully aware that others may benefit from the knowledge I provide in this interview for the Baker Institute and Science History Institute's oral history collections. I understand that there is no cost to participate in this interview and I will not be paid for my time; I will, however, receive a professionally-bound copy of my interview.

My Obligations

Once the Baker Institute has sent me a copy of my oral history transcript, I agree that: (a) I will return the transcript with my edits to the Baker Institute within three months of its receipt by me; and that (b) should I not return the edited transcript within that time, I agree that the Baker Institute and Science History Institute may complete the processing of the transcript and make it available in accordance with the Center for Oral History's normal practices. I also agree that if I should die or become incapacitated before I have reviewed and returned the transcript, all rights and title to and interest in the recordings, transcript, photographs, and memorabilia, including the literary rights and copyright, shall be transferred to the Baker Institute and Science History Institutes, who pledge to maintain the recording and transcript and make them available in accordance with general policies for research and other scholarly purposes.

Questions or Concerns

Should I have any questions or concerns about participating in the creation of this oral history before or during the recording of the interview, or about the processing of the transcript, I can contact the project leads:

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Agreement

I have read the information contained within this release form, and interviewers offered to answer any questions or concerns I had about this document or the interview. I hereby consent to participate in this oral history interview.

(Signature) Signed release form is on file at the Science History Institute
Thomas Lovejoy

(Date) July 6, 2021

Signed release form is on file at the Science History Institute

(Signature)_____ (Signature)_____ (Signature)_____
David J Caruso Kenneth M Evans Kirstin RW Matthews

(Date)_____

This oral history is designated **Free Access**.

RICE UNIVERSITY'S
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THOMAS E. LOVEJOY III

1941	Born in Manhattan, New York City, New York, on 22 August
2021	Died in McLean, Virginia on 25 December

Education

1964	BS, Yale College, Biology
1971	PhD, Yale University, Biology

Professional Experience

Yale University

1963	Zoological Assistant, Prehistoric Exhibition to Nubia
1964-1965	Yale Carnegie Teaching Fellow

Yale Peabody Museum of Natural History

1963	Zoological Assistant, curating Nubian collections
1964	Collector of birds in Kenya

Smithsonian Institution

1970	Research Assistant, Belem Project, National Museum of Natural History
1987-1994	Assistant Secretary for Environment and External Affairs
1994-1999	Counselor to the Secretary on Biodiversity and Environmental Affairs
1999-2001	Senior Scientist

Academy of Natural Sciences of Philadelphia

1972-1973	Executive Assistant to the Science Director; Assistant to the Vice President for Resources and Planning

World Wildlife Fund-US

1973-1978	Program Director
1978-1985	Vice President for Science
1985-1987	Executive Vice President

President's Council of Advisors on Science and Technology (PCAST)

1990-1993	Member

	United States Department of the Interior
1993	Science Advisor to the Secretary
	The Institute for Conservation Biology
1997-1998	Director
	World Bank
1999-2002	Chief Biodiversity Advisor and Lead Specialist for Environment for Latin America and the Caribbean
	United Nations Foundation
2001-2002	Senior Advisor to the President
2010-2021	Senior Advisor to the President
	The H. John Heinz III Center for Science, Economics and the Environment
2002-2008	President
2008-2013	Biodiversity Chair
	George Mason University
2010-2021	University Professor, Department of Environmental Science and Policy

Honors

1978	Scientific Fellow, New York Zoological Society
1983	Ibero-American Award, given at Second Ibero-American Ornithological Congress, Xalapa, Vera Cruz, Mexico
1984	Fellow, Linnean Society of London
1985	Certificate of Merit, Significant Contribution Made to the Understanding of the Natural History of Amazonia, Goeldi Museum, Belem, Brazil
1984	Fellow, American Association for the Advancement of Science History Institute
1987	Commander, Order of Merit of Mato Grosso, Brazil
1987	Medal, 50th Anniversary Brazilian National Parks
1987-1988	Primetime Emmy Awards, Honors Thomas E. Lovejoy for contributions to the Emmy Winning Program NATURE PBS chosen the Outstanding Informational Series
1988	Commander, Order of the Rio Branco, Brazil
1988	Award Winner, Best Social Inventions, '88, for the proposed, Debt-for-Nature Swaps as a new and imaginative idea to improve quality of life, Institute for Social Inventions, London
1989	Fellow, American Ornithologists' Union

1989	Honorary Degree of Doctor of Science, Colorado State University
1990	Carr Medal, for Outstanding Contributions to Knowledge of Our Natural Heritage, Florida Museum of Natural History, University of Florida
1990	Honorary Degree of Doctor of Science, Williams College
1991	Honorary Degree of Doctor of Humane Letters, Lynn University
1992	Frances K. Hutchinson Medal, The Garden Club of America
1992	Global 500 Roll of Honor, United Nations Environment Program
1992	Fellow, The Royal Society for the Encouragement of Arts, Manufactures and Commerce
1992	Rainforest Champion Award, The Rainforest Alliance
1993	Honorary Member of the National Park Service, Costa Rica
1993	Wilbur Lucius Cross Medal, Yale Graduate School Alumni Association
1996	Fellow, American Academy of Arts and Sciences
1998	Honorary Fellow, Association for Tropical Biology
1998	Dr. John Kimball Scott Award for International Health Leadership, National Association of Physicians for the Environment
1998	Gran Cruz, Ordem do Merito Cientifico (Order of Scientific Merit), Brazil
2000	Fellow, American Philosophical Society
2000	Edward Hopper Day Medal, Academy of Natural Sciences of Philadelphia
2001	John & Alice Tyler Prize for Environmental Achievement, University of Southern California
2002	Distinguished Service Award, The National Association of Biology Teachers
2005	Conservation Science Award, The American Ornithologists' Union
2005	Honorary Membership, World Innovation Foundation (WIF)
2008	Henry Shaw Medal, Missouri Botanical Garden
2009	Award in the Ecology and Conservation Biology Category, BBVA Foundation Frontiers of Knowledge
2011	Joao Pedro Cardoso Medal for Environment, Estado de Sao Paulo
2012	Outstanding Service Award, American Institute of Biological Sciences (AIBS)
2012	Blue Planet Prize, The Asahi Glass Foundation
2013	Leaders for a Living Planet Award, WWF-International
2014	International Conservation Award, Botanical Research Institute of Texas
2014	Commandeur dans l"Ordre des Palmes Académiques, Embassy of France
2014	Gold Medal, New York Botanical Garden
2015	Woodrow Wilson Award for Public Service, Woodrow Wilson International Center
2017	Lifetime Achievement Award, National Council of Scientists for the Environment
2017	People and Planet Champion Award, The Rainforest Alliance
2018	Beck Family Presidential Medal for Faculty Excellence in Research & Scholarship, George Mason University

2019	STEM Award, Science Museum of Virginia
2019	Medalha Rio Negro, Instituto Nacional de Pesquisas da Amazônia (INPA)

ABSTRACT

Thomas E. Lovejoy III was born in New York City, New York, in 1941. An only child, Lovejoy spent a year-and-a-half on the eastern shore of Maryland out in nature as a young child. His father ran a life insurance company, and his life revolved around that company. When Lovejoy was twelve years old, he first saw a picture of a maloca in the Amazon, which he remembered for the rest of his life. His parents decided it would be good for him to go away for high school, and he attended Millbrook School, about a hundred mile north of New York City. There Lovejoy worked at the zoo to fulfill the community service requirement. His freshman biology teacher, Frank Trevor, inspired Lovejoy's lifelong interest in biology. He spent his free time exploring the six hundred acres of beautiful countryside the school owned. When it came time to choose a college, Lovejoy selected Yale University, where his father had also attended. He quickly declared his major as biology and began taking as many science classes as he could. During his time at Yale, he took a year off to go on an expedition looking for prehistoric artifacts in Nubia near Aswan, Egypt. When he returned to Yale, he decided to pursue a PhD in biology upon graduation. Lovejoy decided to stay at Yale for graduate school because he had a Yale Carnegie teaching fellowship. He co-taught a class on ecology and a class on ornithology. During his PhD program, his former freshman advisor, Phil Humphrey, encouraged Lovejoy to get funding to spend a summer in the Amazon with him banding birds.

That trip transformed Lovejoy's life, as he would spend the rest of his life studying and visiting the Amazon. He even spent two years living in the Amazon from 1967 to 1969 working on research for his PhD. When he returned to the US, he learned more about computers to analyze his dataset and wrote his thesis, which he completed in 1971. Upon graduation, Lovejoy briefly worked at the Academy of Natural Sciences in Philadelphia, Pennsylvania, before joining the World Wildlife Fund. At first, he mostly reviewed proposals for funding, but soon moved into a role that promoted the WWF doing science itself, including through his habitat fragmentation project in Brazil. After a number of years at WWF, Lovejoy moved onto the Smithsonian, managing at first external affairs and later environmental topics. Around this time, he was also asked to serve on George H. W. Bush's President's Council of Advisors on Science and Technology (PCAST). Lovejoy mentions PCAST's trip to Camp David in detail and discusses fellow members of the group. In 1992, Lovejoy started working for the World Bank, specifically focused on Latin America and the Caribbean. When 9/11 occurred, he was in Australia giving a talk, and it took him about a week to return home to the US. After a brief stint as president of the John Heinz Center, Lovejoy became a professor at George Mason University focused exclusively on graduate students. He concludes with his hopes that science should be viewed as central to every decision in presidential administrations.

INTERVIEWER

David J. Caruso earned a BA in the history of science, medicine, and technology from Johns Hopkins University in 2001 and a PhD in science and technology studies from Cornell University in 2008. Caruso is the director of the Center for Oral History at the Science History Institute, president of Oral History in the Mid-Atlantic Region, and editor for the Oral History Review. In addition to overseeing all oral history research at the Science History Institute, he also holds an annual training institute that focuses on conducting interviews with scientists and

engineers, he consults on various oral history projects, like at the San Diego Technology Archives, and is adjunct faculty at the University of Pennsylvania, teaching courses on the history of military medicine and technology and on oral history. His current research interests are the discipline formation of biomedical science in 20th-century America and the organizational structures that have contributed to such formation.

Kenneth M. Evans is a scholar in science and technology policy at Rice University's Baker Institute for Public Policy. He received his B.S. in physics from the University of Virginia and his M.S. and Ph.D. in applied physics from Rice University. His research focuses on the history and organization of the U.S. federal science advisory and policymaking system, with an emphasis on the role of the White House Office of Science and Technology Policy.

ABOUT THIS TRANSCRIPT

This interview was conducted as part of the project, "The President's Scientists" (NSF SMA SBE #1854055). The goal of the project is to improve and expand existing knowledge of the role of the President's Council of Advisors on Science and Technology (PCAST), and its impact on U.S. federal policy. This project examines the working nature and policy impact of the council by compiling and analyzing presidential archives and university collections of former presidential science advisors (developing a digital archive of this material); and conducting oral history interviews of select former PCAST members to determine their perspectives on PCAST, as well as their personal histories before and after their tenure on the council.

The Center for Oral History, Science History Institute (the Center) and Rice University's Baker Institute for Public Policy (BIPP) are committed both to preserving the recording of each oral history interview in our collection and to enhancing research use of the interviews by preparing carefully edited transcripts of those recordings. The preparation of interview transcripts begins with the creation of a verbatim typescript of the recording and proceeds through review and editing by staff of the Center and BIPP; interviewees also review the typescript and can request additions, deletions, or that sections be sealed for specified periods of time. We have established guidelines to help us maintain fidelity to the language and meaning of each recorded interview while making minor editorial adjustments for clarity and readability. Wherever possible, we supply the full names of people, organizations, or geographical locations mentioned during the interview. We add footnotes to the transcript to provide full citations for any publications that are discussed, to point to extant oral history interviews, and to clear up misstatements or provide context for ambiguous references in the transcript. We use brackets to indicate the addition of material that was not in the audio, and bracketed ellipses to indicate the deletion of recorded material. The transcript also includes time stamps at five-minute intervals. We omit without noting most instances of verbal crutches and all instances of nonlexical utterances. We also make small grammatical corrections where necessary to communicate interview participants' meaning. Finally, staff of the Center and BIPP create the abstract, chronology, and table of contents. With the availability of online full-text searching of our transcripts, the Center for Oral History opted to discontinue the practice of preparing a back-of-the-book index for each oral history transcript in 2020.

This interview was conducted on 7 and 30 July 2021. Dr. Lovejoy passed away on 25 December 2021, prior to the completion of the transcript. As a result, Dr. Lovejoy was unable to review the manuscript prior to its completion; however, he did approve of the transcript being used. The transcript has been edited in accordance with Rice University's Baker Institute for Public Policy and the Science History Institute's standard procedures.

The Science History Institute is committed to the responsible presentation of the history of science by addressing evidence of inequality and oppression as well as the subsequent silences in our collections. To that end, we recognize there may be language in our oral history collection that is outdated, offensive, or harmful, such as, but not limited to the following: racist, sexist, Eurocentric, ableist, and/or homophobic language or depictions.

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INTERVIEWEE: **Thomas E. Lovejoy III**

INTERVIEWERS: **David J. Caruso**
Kenneth M. Evans

LOCATION: **via Zoom**

DATE: **7 July 2021**

CARUSO: [. . .] This is David [J.] Caruso. I'm here with Kenny [Kenneth M.] Evans. We are conducting an oral history interview with Dr. Thomas [E.] Lovejoy [III]. We are doing this virtually. This is part of the PCAST project as funded through the National Science Foundation. Today is July 7, 2021. Thank you again for agreeing to speak with us today, Dr. Lovejoy. As I mentioned, I want to start at the very beginning, and I want to hear a little bit about what it was like growing up in . . . or at least I know that you were born in New York City, [New York], in 1941. Did you actually grow up in the city?

LOVEJOY: Yeah, no, I actually did grow up in the city or at least, most of those early years. I did spend like a year-and-a-half on the eastern shore of Maryland when I was about four. But other than that, I was Manhattan-based.

CARUSO: What part of the city? I grew up in New York, as well, so I'm just curious—

LOVEJOY: You know, I was Upper East Side and then I did go away to boarding school, which proved to be a really critical experience in my development, and it got me into what we call biological diversity these days. But other than that and a lot of summers away, I grew up in midtown Manhattan.

CARUSO: Okay. Now can you tell me a little bit about your family? Are you an only child? Do you have siblings?

LOVEJOY: Yeah, no, I'm an only child.

CARUSO: And what did your parents do? Jobs . . .

LOVEJOY: So my father [Thomas E. Lovejoy, Jr.] ran a life insurance company and his father before him. My grandfather took my six-year-old father and his three older sisters from Montgomery, Alabama, to Manhattan in 1912 to essentially take the leadership of the Manhattan Life Insurance Company.

CARUSO: Okay. So you being born in 1941, I'm assuming you don't have too many memories of wartime America. What are some of the earliest memories you do have? Maybe something happening around the city, going to school. What's the earliest thing that you do remember?

LOVEJOY: Well, in terms of a historical event, the two earliest memories I have are [Harry S.] Truman defeating [Thomas E.] Dewey and Winston Churchill giving his Iron Curtain speech, which I saw on a newsreel.

CARUSO: Interesting. Okay. So you grew up in Manhattan 1940s, postwar . . . mostly. I mean, by the time you were school age, it was [a] postwar world. What did you . . . I'm curious to know just a little bit more about what your family life was like, right? Was your family religious? Were they political? Did one of your parents have an interest in music and so wanted you to have . . . to learn to play an instrument? What was your early family life like, and what were . . . yeah, I'll leave it there.

LOVEJOY: So, you know, my father's life was largely revolved around the life insurance company. My stepmother's life—because it was my stepmother by then—was just, sort of, leading a household and, you know, cooking and that kind of stuff. But she [Audrey H. Lovejoy] was a descendant of the original Steinway of Steinway & Sons, so there was a connection through that side of the family to pianos, obviously, and to the performing arts.

CARUSO: Okay. You mentioned at that point, it was your stepmother. Did your **<T: 05 min>** mother pass away, or did your parents . . . ?

LOVEJOY: Well, my father divorced my mother [Jeanne G. Lovejoy] when I was about three because she had a hopeless case of alcoholism.

CARUSO: Oh, I'm sorry to hear that.

LOVEJOY: My father had tried really hard to help her and finally concluded that he couldn't change her and that it was actually bad for me, so he divorced her.

CARUSO: Did you see your mother at all growing up, or were you . . . ?

LOVEJOY: Yeah, you know, I did see her a bit. She was very talented human being, and today there'd probably be some term for her condition, but she just was hopelessly addicted to alcohol, and it killed her by the time she was forty-eight.

CARUSO: Wow. I'm sorry to hear that. Do you . . . what are your earliest memories of things that you would do around New York City growing up? I know . . . so I grew up in Staten Island, so not the city itself. I always wanted to be in the city, but, you know, some of the things I used to do as a kid were running around the neighborhood with other kids, playing baseball, catch, tag, things like that. What were you doing when you were young just around the city itself? Were you out and about? Did you . . . were you in an apartment building and you just met up with other kids in that apartment building?

LOVEJOY: I grew up in an apartment building, you know, a couple blocks from Central Park and the zoo, and the summers, however, I would be outside almost all day long wherever we were for the summer. The years I spent on the eastern shore of Maryland as a little kid were very formative because I was always outside, I was always interested in nature and that ultimately led me to be what I was . . . what I've become because I had a really great teacher when I was fourteen. If I hadn't had that teacher, I'd probably still be trying to manage a failing insurance company.

CARUSO: So, what brought you to the eastern shore of Maryland. Did your family have a home there?

LOVEJOY: My . . . one of my father's older sisters [Susan L. Harris] lived there and so when he was looking for a place for me to be as he was getting divorced, that's what he ended up choosing. So it was a pretty great choice in retrospect—a year-and-a-half on the eastern shore of Maryland or two years before there were any bridges or anything. It was pretty rural.

CARUSO: So you mentioned going out in nature. What were you doing during your nature treks or nature visits in Maryland? Just exploring things, playing in rivers?

LOVEJOY: Yeah, sort of, all of the above. But the real fascination with animals got cemented when I was about fourteen. But there is a great story of when my father saved up all his gas coupons and drove down to see me on the eastern shore, and he and my uncle were sitting on

either side of a radio, which in those days was as big as a piece of furniture, and they're actually discussing an Edward R. Murrow broadcast from London, [England], and apparently, I interrupted and said, "Can we talk about something interesting like skunks and snakes and things?" [laughter] So when I write my little book, that's how it's going to start.

CARUSO: Skunks and snakes and things?

LOVEJOY: Yeah.

CARUSO: Sounds like a great title.

LOVEJOY: And it's real.

CARUSO: What's your . . . you mentioned that you had an influential teacher when you were fourteen years old, and I want to hear more about that. I assume that was high school—right?—so not middle school?

LOVEJOY: That's **<T: 10 min>** right. It was essentially ninth grade.

CARUSO: Okay. So before we get to high school level, can you tell me a little bit about what your earlier education was like in terms of, you know, were there subjects in school that really interested you other than I'm assuming science was probably in that batch? But other than science, were you drawn to studying certain historical eras? Were you really interested in comic books? You know, what sort of interests did you have as a younger child beyond the time that you spent in Maryland?

LOVEJOY: So I went to a private school [The Browning School], which was two blocks from our apartment, an all-boys school—still is. Among other things, I was fascinated with Latin because it was so carefully constructed, and I certainly enjoyed my science classes. And I remember a social science textbook probably in like . . . when I was like maybe twelve or something that had a photograph in it or an illustration in it of an Amazonian maloca, which is, you know, those structures the Amazon Indians build; they're quite large.[1] But that always stuck

[1] A maloca is a large communal home used by Indigenous people in the Amazon. See Samuel Bravo Silva, "The Matsés Maloca. Construction of a Collective Dwelling in the Amazon," *ARQ* 103 (2019). Accessed at https://archives.cl/en/the-matses-maloca-construction-of-a-collective-dwelling-in-the-amazon/ on 8 December 2021.

in my mind for whatever reason. And so ending up having spent decades of time working in the Amazon since, I've never been able to forget that first memory.

CARUSO: What activities did you engage in outside of school?

LOVEJOY: So, you know, they were pretty solitary activities, so I did a lot of reading. I loved to read. In the summers, I would just go out with whoever the kids were and poke around in the forest and things like that basically just making it up as we went. It was a great childhood. But it suddenly came into focus when I had that biology teacher.

CARUSO: Now you . . . so you mentioned going to a private school that was just a couple blocks away. You also mentioned going to a boarding school. Was high school a boarding school?

LOVEJOY: Yes.

CARUSO: Okay, so what brought you to that boarding school instead of staying at the local private school?

LOVEJOY: So my father decided it would be good for me to go away to school, and I agreed with him. My stepmother wasn't always easy. Let's put it that way. On the short lists of school to look at was the Millbrook School, which is a hundred miles north of the city. My father had known the founding headmaster's wife before they even were married, and one of my Steinway cousins had actually gone there, and his sister actually married somebody else who'd gone there, so there was, sort of, a bit of a connection. But when I got there, I discovered it had a zoo. I said, "This is where I want to go. I don't want to look anywhere else." And happily, I got in.

CARUSO: And so you said it was about a hundred miles away? Is that . . . ?

LOVEJOY: Yeah, it's about a hundred miles north of New York City.

CARUSO: Okay. [coughs] Excuse me. What was it like transitioning into life at Millbrook?
<T: 15 min>

LOVEJOY: Well, you know, it was discovering a whole new world, you know, as an only child, but . . . as I figured it out, I can . . . I got really into it, and so I actually worked at the zoo. They had a program called community service; everybody did some community service, and some people worked on the zoo and looked after the animals, so I was part of that. But one was required to take biology in the first or second year, and I literally said to my parents, "I'll take it the first year and get it over with," totally unaware that the guy [Frank Trevor] who started the zoo was teaching biology. And this was 1955, and he marched us through the plant kingdom and the animal kingdom in the course of the year, and all other parts of biology were hung on in appropriate places. So before I was fifteen, I understood the outline of life on earth, which today we call biological diversity and I was just totally fascinated with it and still haven't gotten over that.

CARUSO: So, was it the subject matter that was fascinating, or was there something about the teaching style that made the subject matter more fascinating?

LOVEJOY: It was both. It was both.

CARUSO: So what was it about the teaching style?

LOVEJOY: Well, he was a very charismatic teacher, and he used specimens and the outdoors as teaching aids, so it really brought the variety of life on earth, you know, to life in the classroom.

CARUSO: And since I'm again unfamiliar with the school, was it co-ed, or was it boys only?

LOVEJOY: At that point, it was boys only.

CARUSO: Okay. And how many students did they . . . ?

LOVEJOY: It later went co-ed, and one of my daughters [Katherine L. Petty] went there.

CARUSO: Oh. And how many students did they have in each entering class?

LOVEJOY: Oh, it was small. I think my class was about thirty-five.

CARUSO: Okay. My high school was on the Upper East Side—Regis High School—I don't know if you've heard of it while you were there. We had a class of—entering class of—about 125, so relatively small school, but thirty-five, I think, would seem a whole lot smaller than that. What . . . do you remember roughly how many students were in your public . . . in the private school you were going to in New York City?

LOVEJOY: So, I can't tell you the total number of students, but I can tell you that the class size was even smaller because I remember in maybe the—it might have been the eighth grade before I went away—I don't think we were more than maybe a dozen students.

CARUSO: Okay, so this was actually a larger school than the one—

LOVEJOY: It was, but it was one where the teachers knew every student, right? It was great.

CARUSO: What was the structure of the school like in terms of the things that . . . I mean, growing up, my mother took care of making meals. At some point when I was a teenager, I started . . . . I learned how to do my own laundry and how to sew things. In the Millbrook environment, were you taken care of as you were at home, or were there certain responsibilities that you needed to take on as someone at the boarding school? Were you doing your own laundry and ironing? Were you making meals? Were you responsible for cleaning the rooms, cleaning hallways? I'm just curious to know what life was like at that boarding schools in terms of, you know, learning the skills that one normally picks up as they start entering into adulthood.

LOVEJOY: Yeah, so **<T: 20 min>** we didn't make our own food. We basically didn't do our own laundry, but we took care of our rooms for sure, and they got inspected carefully. And all of that fitted into a larger program of community service, so everybody played some role in keeping the school functioning. I lucked out because taking care of the zoo—the animals—and also the zoo fulfilled that requirement, and I was happy as a clam.

CARUSO: So what was your work at the zoo like?

LOVEJOY: Well, basically, you know, this was a zoo that was . . . which today is the smallest accredited zoo in the Association . . . American Association of Zoos and Aquariums. It actually passed all those requirements. But basically, today and even back then, we basically did all the cleaning and the feeding and, you know, looking after the animals. And they also were used in teaching, so classes would come over and be lectured about x, y, or z animals, which, of course, was much more interesting when it was a live animal, right? So it's been a really good formula.

Unusual, but a really good formula, and stewardship of the natural world was from the beginning a keystone value of the school and the zoo merely reinforced that.

CARUSO: Were there particular animals that you were fond of at the zoo that you preferred taking care of more than any others?

LOVEJOY: Well, the most spectacular I took care of was a cheetah [Caesar the Cheetah], and there were in those days, Disney used to produce wildlife features in the movie theaters because they weren't on TV yet, and one of them was called the *African Lion*, and this was the cheetah that did the running shots in the *African Lion*.[2] Cheetahs are actually quite tame as animals. They interact really well with people. So I took care of the cheetah for a while until one day I had it down at a football game, and it saw a cow on a distant hillside, and it took off. And I only weighed 130 pounds, so I was plowing furrows with my heels, right? And that's when the headmaster decided maybe it wasn't such a good idea to have a cheetah at the zoo, but I was sorry to see it leave. It was a wonderful animal.

CARUSO: Any other animals that were of interest or greater interest to you than others?

LOVEJOY: There were lots of them, you know. There was a neotropical weasel called the tayra. It was always interesting to see what kinkajou would actually do for bananas. You could actually get a kinkajou to hang by its tail and hold a banana in each paw, and then it didn't know what to do, of course. [laughter] They were pretty charming. And we had a red-tailed hawk of considerable age, which I took care of. And it was **<T: 25 min>** a fierce animal. I had to be careful. So there were some things you really did need to be careful about, but [the] biology teacher knew which ones those were and how to manage them.

CARUSO: What were your typical days in high school like—classes? You know, was it classes nine to five? Nine to three?

LOVEJOY: So, it was a pretty early start in the day, and I think by maybe eight o'clock we were all assembled as a school for announcements and stuff and then we went off to classes for the rest of the morning. And then there was a period set aside for community service, so I ran over to the zoo, right? Sports in the afternoon, but not all of the afternoon, so some of the afternoon was set aside for study hall or an extra class. And we actually had classes on Saturday mornings.

[2] Millbrook School's Trevor Zoo, "Throwback to 1957, Tom Lovejoy '59 with Caesar the Cheetah," Facebook, October 18, 2018. Accessed at https://www.facebook.com/trevorzoomillbrook/photos/throwback-to-1957-tom-lovejoy-59-with-caesar-the-cheetah-the-first-three-weeks-w/1117246248441052 on 7 June 2022.

CARUSO: And what did you do with the time that you weren't in class or sports or doing the work at the zoo? Were you studying? Did you get to explore the surrounding area? Were you involved in extracurricular activities—chess club, ping pong club? I don't know. I'm just throwing some examples out there.

LOVEJOY: So the school then had six hundred acres of beautiful countryside of its own, so I spent most of my otherwise unoccupied time exploring all that.

CARUSO: And on weekends too?

LOVEJOY: Yeah.

CARUSO: Were there other classes other than that biology teacher in freshman year that really stood out to you as being of great interest? I don't know. Maybe physics took your fancy at some point or Victorian literature. Were there other topics of study that you found quite interesting during your time in high school?

LOVEJOY: Well, you know, most of them did. I did not take physics there. American history, French. I had years of French. And somewhere in the course of all of it, I learned how to write.

CARUSO: Can you say a little bit more about that? How did you learn how to write?

LOVEJOY: Well, you had to take English every year, right? Basically, you had to write something every weekend and then you had to basically listen to the evaluation of what you'd written . . . and I can't say how it actually enabled me to learn how to write, but it did.

CARUSO: Okay. For your science classes, did you have to do . . . did you have labs, and did you have to do lab reports?

LOVEJOY: Yes, we had to do lab reports, and yeah, we . . . there were lots of quizzes involving real specimens and the like—you know, looking down the microscopic at slides of x, y, or z. There was plenty to do in that course.

CARUSO: What did you do when school was not in session? Did you go back home? Was there an option to stay at Millbrook?

LOVEJOY: There was not an option to stay, so I went home, and the family went somewhere for the summer. So one summer it was Point o' Woods on Fire Island, [New York], and another summer or two, it was up in New Hampshire because I was getting sick of the ocean. Again, those were opportunities to get out into nature.

CARUSO: And when you say, "the family," so your father was able to go up, go away for the entire **<T: 30 min>** summer as well, or just—

LOVEJOY: No, no. He would commute depending on where we were, it would be every weekend, but if it was New Hampshire, it was every other weekend. And so, you know, when you're an only child, you get pretty good at entertaining yourself.

CARUSO: Yeah, I was just curious if it was you and your stepmother or if there was anyone else.

LOVEJOY: No, nobody else.

CARUSO: Okay. So I know that you wind up—wound up—applying to and going to Yale [University] for your undergraduate degree. Prior to applying to Yale, was it a natural assumption that you were going to be going on to college? Was that something that your parents were insistent upon or emphasized as part of what they saw as the next steps for you, or was that something that—

LOVEJOY: Yeah, I think it was basically a given.

CARUSO: Okay, so you were just going to be going to college?

LOVEJOY: Yeah, so my father had gone to Yale, and he was keen for me to go to Yale, and my step-grandfather [Horace R. Paige] had come close to catching the first forward pass in football, so he wanted me to go to Yale, but I also looked at Cornell [University] because it had such a strong program in natural science. But in the end, I decided to go to Yale. You know, before . . . when I was applying, I actually had a meeting with the chair of the zoology department [Edgar J. Boell, Ross Granville Harrison Professor of Experimental Zoology], which

allowed me to skip introductory biology, which may or may not have been a good thing because it would have included some things I only dimly caught up to later, but . . . Yale had this incredible natural history museum—the Peabody [Museum of Natural History]—which is being renovated right now to what will probably be the most amazing transformation of a university natural history museum ever. And so I hung out with people at the museum almost from the starting day. My freshman advisor was the assistant curator of birds [Philip S. Humphrey].

CARUSO: So Cornell and Yale were the only two schools you considered?

LOVEJOY: Yeah.

CARUSO: How many . . . ?

LOVEJOY: It was a different world, you know.

CARUSO: Yeah, yeah. I know a lot of people didn't apply to as many schools as is quite common today. And it sounded like you had a good sense of what it is that you wanted to do going into college? Unlike many individuals who are still uncertain about the—

LOVEJOY: Well, that's true. That's true.

CARUSO: How was it transitioning to Yale? I assume that the entering class was . . . so you went to an extremely small school, then a small school, and then to Yale. About how many students—entering freshmen—were there at Yale at the time?

LOVEJOY: About a thousand.

CARUSO: About a thousand, so how was it switching to that level of intensity with individuals around?

LOVEJOY: Well, it was an order of magnitude change or two, but I did know some of the students in my incoming class. One of them was my roommate. So, you know, pretty quickly you make that transition.

CARUSO: So your roommate from Millbrook also went to Yale? Is that . . . ?

LOVEJOY: He was not a roommate at Millbrook, but he was at Yale.

CARUSO: Oh, okay. And did you go in declaring a major?

LOVEJOY: Yes.

CARUSO: Biology?

LOVEJOY: Biology all the way.

CARUSO: Okay. So what classes were you . . . so you placed out of . . . or you were allowed to skip that first bio course—right?—what other classes were you **<T: 35 min>** enrolling in when you started at Yale?

LOVEJOY: Well, in terms of science?

CARUSO: In terms of everything.

LOVEJOY: Well, I certainly took an additional year of French, which I needed like a hole in the head. And I actually took advanced calculus, which was a disaster, because Yale had been involved in creating the new math, and the professor I had just was not very good at getting it across to the students, at least not to me. So there are probably some other things that first year and at my father's insistence, I took economics the second year or third year or something like that. I took geology, which was terrific, and in biology, I took ecology, and there was a course on the biology of vertebrates and another on the biology of invertebrates. I took botany, and I took a bunch of paleo [paleontology] courses, which were in the geology department because Yale was home for so much of the dinosaur research you couldn't possibly avoid it unless you tried to. And, of course, I didn't want to; I really wanted to learn all that stuff. And I took mammalogy, ornithology, and then I took a year off and went on an expedition, which was looking for prehistoric artifacts in Nubia while they were building the High Dam at Aswan, [Egypt]. Every other expedition involved in Nubia was looking for classical archaeological remains; this was looking for prehistoric, and I was added to collect biological materials with the view being that we would probably find biological materials in association with prehistoric remains, which turned out not to be the case.

But in any case, I had this extraordinary year in Egypt. First Aswan-based pretty much and then on a houseboat south of Aswan where we basically moved in the houseboat up and down the river collecting various things . . . it was . . . and even pulled up in front of Abu Simbel late one afternoon and almost literally tied up around the big toe of one of the pharaohs. That was before they moved it—right?—which was an extraordinary achievement. But I'll never forget, you know, the sunlight penetrated to the innermost chamber of that temple on the pharaoh's birthday. I had a lot of time to think about those things in those days. So that was a pretty wild experience.

CARUSO: So, was this a year off in between college and graduate school, or was this a year off while an undergraduate?

LOVEJOY: While an undergraduate.

CARUSO: So, which year did you . . . so you were in university for one or two . . . how many years . . . what year did you take [off]?

LOVEJOY: So I went between junior and senior year.

CARUSO: Okay, all right, so three years at Yale, one year on the expedition, and then coming back and finishing your senior year?

LOVEJOY: Right.

CARUSO: Okay. So one quick question about Yale. I can't remember when many of the undergraduate students in the United States like Hopkins [Johns Hopkins University] and others became co-ed. Was Yale co-ed at the time that you were there?

LOVEJOY: Actually, no, it wasn't, but it was getting close to it. **<T: 40 min>** I was actually in graduate school when the transition occurred, and it became a totally different place. And one of my daughters actually went there, so . . .

CARUSO: Yeah, I assume because I know with Johns Hopkins, it was mid-sixties when the undergraduate institution went co-ed, but the graduate school had been co-ed for many years. Was it the same at Yale where the graduate . . . ?

LOVEJOY: It was.

CARUSO: Okay, so it was only . . . so it became co-ed for the undergraduates, but the graduate school had already been coeducational?

LOVEJOY: Yeah, and because I'd been hanging out a lot with the professors and their graduate students, coeducation just seemed natural to me.

CARUSO: Okay. So, can you tell me a little bit more about how the expedition . . . you being part of the expedition came to be? You'd mentioned that your undergraduate advisor was a curator—I think—in the museum?

LOVEJOY: Yeah, no, he had already gone on to the Smithsonian by then, although in the end, he was the person who got me started going in the Amazon. So it was the curator of mammals [Charles A. Reed] who invited me to do that, which was a very exciting thing to do, of course.

CARUSO: Why . . . were you the only undergraduate that got invited, or were there others?

LOVEJOY: So I was the only undergraduate that first year. There was a different undergraduate the second year, who actually ended up becoming my brother-in-law [Charles Seymour III]. [laughter] Those things happen, you know? And probably some others after that.

CARUSO: So, why you? Why were you selected to go on this expedition?

LOVEJOY: Well, I think, amongst other things, I'd really been hanging around the museum a lot, really into what the museum was all about—not just taking the courses, but, you know, volunteering to help with x, y, or z like, you know, registering bird specimens in the big catalog, which you did in those days with a crow quill pen and India ink. So I was just . . . I was a museum groupie.

CARUSO: That's, kind of, what I was assuming, but I wanted to make sure. So you spent a lot of time there, you volunteered your time there. I mean, in some ways, it sounds like the museum because the new zoo for you, right? So like for Millbrook, you had the zoo, and then you moved on to the museum at Yale.

LOVEJOY: Yeah, I think that's a good analogy.

CARUSO: Okay. Did you have any reservations about taking a trip, taking a year off and being in and around Aswan as a junior in college?

LOVEJOY: Actually, none at all.

CARUSO: Really?

LOVEJOY: I was just interested in having adventures.

CARUSO: Had you traveled internationally before?

LOVEJOY: I had been to France once, and that was it.

CARUSO: So beyond . . . so I understand that, you know, going on these expeditions, you're with a group of individuals, you have specific work that you're going to be doing and it's very intensive—right?—because you have a limited amount of time to be there and to get the work done. But I also assume that you're not working, you know, eighteen hours a day, twenty hours a day seven days a week. When you weren't working at the expedition looking for materials, looking for things to study, what were you doing in that area? Were you exploring surrounding towns and villages? Were you hiking up sand dunes? What were you doing in your downtime for that year?

LOVEJOY: Well, there's certainly more things to explore beyond just the hotel where we were based or later the houseboat. **<T: 45 min>** In Aswan in particular, there was . . . on the other side of the river [Nile River] was the tomb of the Aga Khan [III], which I remember going across the river and climbing all the way up to this exquisite tomb and essentially Arabic architecture without any graven images and a single rose on the Aga Khan's coffin, which was replaced every day by his widow [Begum Om Habibeh Aga Khan] who would walk all the way up from down by the river to where the tomb was to change the rose.

CARUSO: What was it like experiencing a culture completely different from the one you'd grown up in?

LOVEJOY: Well, it was an eye opener—let me tell you that. But it was really interesting—right?—and, you know, this was a moment when basically Americans were pretty much in favor almost everywhere in the world. So to pick up and go off on a trip—even solo—in some of these countries was not considered a dangerous thing to do; it was just considered an interesting adventure.

CARUSO: You were also traveling at a time . . . I mean, so this was several years post-Sputnik, right? I assume this was post-Kennedy's assassination? You finished your degree at Yale in '64, so . . .

LOVEJOY: Yeah, so [John F.] Kennedy was still alive that year. He was assassinated in November of my senior year.

CARUSO: Okay, so this was prior to the Kennedy assassination, but, you know . . . and you mentioned that traveling as a US citizen then is different from traveling as a US citizen now, but this is also a period of time where the Cold War is very active, when . . . . I forget when the Cuban Missile Crisis happened specifically, but the fear of the Soviets was clearly part of American culture at the time.[3] Was any of that . . . were you exposed to any of those sorts of issues or discussions or political beliefs, political systems while you were traveling abroad?

LOVEJOY: There was a lot of tension over the Aswan Dam, which the Russians paid for, and actually helped build. There were a lot of Russians in Aswan, but [Gamal Abdel] Nasser, you know, also wanted to stay on the good side of Americans, so I never felt at risk in any sense.

CARUSO: Okay. The studies that you were doing on this expedition, did any of them result in published papers?

LOVEJOY: So there was some, but mostly just the specimens ended up at the Peabody Museum of Natural History.

CARUSO: And the . . . some of the publications that came out, did you have any part in writing those?

[3] The Cuban Missile Crisis occurred in October 1962 when the United States and the Soviet Union almost went to war due to the presence of Soviet missiles in Cuba. See Martin J. Sherwin, "The Cuban Missile Crisis at 50: In Search of Historical Perspective," *Prologue Magazine* 44, no. 2 (Fall 2012). Accessed at https://www.archives.gov/publications/prologue/2012/fall/cuban-missiles html on 9 December 2021.

LOVEJOY: I did.

CARUSO: Who were you working with to write those papers?

LOVEJOY: It was primarily the curator of mammals, Charles Reed.

CARUSO: And what was it like writing a scientific article for publication? I mean, it's different from the lab reports that you might generate in high school or in college. And reflecting on the history of scientific writing, it is very stylized. It's a specific form of writing that one needs to **<T: 50 min>** undertake in scientific publications. What was the process like of learning how to write scientifically for publication?

LOVEJOY: Well, I would say it was a bit daunting, but, obviously, in the end, you learned how to do it.

CARUSO: Was there just a back-and-forth exchange between . . . ?

LOVEJOY: Yeah.

CARUSO: Okay, so picking up on how it is that you need to construct your arguments, present your evidence, and things along those lines.

LOVEJOY: Right.

CARUSO: If you had been given the opportunity to spend another year in Aswan, would you have taken it?

LOVEJOY: Well, that's a really interesting question, which I've never ever thought about. So it's really hard to second-guess it, but I would guess that from the beginning, it was framed in my mind as a one-year exercise.

CARUSO: So it was going to happen and then it was going to be done and then you'd finish up your education?

LOVEJOY: Which is different from when, you know, I went off to the Amazon. That was open-ended.

CARUSO: In your time at Yale, you are taking science classes, you're hanging out at the museum. Are you thinking about what it is you want to do with the degree that you're on track to get, right? You're going to be receiving a degree, a BS from Yale in biology. Did you have a plan for what was going to come after that while you were an undergraduate?

LOVEJOY: So I think over time it grew to be going for a PhD, which was a big, scary leap to make, but I swallowed hard and did it. And in all that process, I ended up with the enormous good fortune of having the father of modern ecology, G. Evelyn Hutchinson, agree to be my thesis advisor. One of the most original minds I've ever encountered in my life and somebody who really knew how to get the best out of his students by just little gentle nudges and questions.

CARUSO: So when you were . . . you'd mentioned that as an undergraduate, you were spending time with professors, graduate students, you were hanging out with them. Were you getting a sense for what a graduate degree was like through those experiences, or did you receive any formal mentoring about pursuing an advanced degree in the sciences while you were an undergraduate?

LOVEJOY: You know, I don't think so, but because I was hanging out with a lot of graduate students, you know, I was absorbing stuff like, you know, osmosis. And, even so, it was a really gutsy decision, and I'm glad I made it.

CARUSO: So what month did you come back from Aswan?

LOVEJOY: I came back probably in—I would guess—June or something.

CARUSO: So June of '63?

LOVEJOY: Yeah, so I had the summer to try and do some of the follow-up like at the collections registered in the museum and things like that.

CARUSO: Because I mean, it may have changed, but, you know, when I was applying to graduate school, that's something that you did in the fall and then you start hearing back from graduate schools in the spring. Did you . . . so when you came back from your year off, you knew that you had one year left to finish your degree. Did you start applying to graduate schools that fall—the fall of '63?

LOVEJOY: Yes.

CARUSO: And what graduate schools were you considering?

LOVEJOY: I certainly looked at Michigan [University of Michigan], **<T: 55 min>** which was really great for ornithology, and I was, you know, already a confirmed birdbrain. And so Michigan was the main choice other than the possibility of staying at Yale.

CARUSO: And Cornell wasn't under consideration?

LOVEJOY: No, it wasn't at that point. It had . . . Cornell at that point had, sort of, gone through an osmosis to essentially molecular systematics, which happily has since corrected itself, and the laboratory of ornithology at Cornell is amazing. But wasn't appealing at that particular time.

CARUSO: Okay, what was it about Michigan's program? Simply that they were extremely strong in ornithology?

LOVEJOY: Yeah, very strong in ornithology.

CARUSO: Did you go out there to visit?

LOVEJOY: I did.

CARUSO: And what was your experience there in terms of visiting? Did you meet with a lot of faculty members?

LOVEJOY: Yeah, it was very cordial. It was very cordial.

CARUSO: And other than submitting an application, were there are other components to . . . other than submitting like the paperwork for an application, were there are other components to applying to Michigan? Did you need sponsorship from a specific faculty member or anything else?

LOVEJOY: Well, I basically think I had that from Bob [Robert W.] Storer. So I had that on the one hand, and I had a Yale Carnegie teaching fellowship if I stayed at Yale and taught a couple undergraduate courses on . . . and took a couple . . . sorry, I misstated it—taught a couple undergraduate courses and took a graduate course or two. So that basically set me up in a good kind of way, so I decided to stay.

CARUSO: And did you receive any feedback from faculty members at Yale encouraging you to go elsewhere? I know, sometimes it . . . I've interviewed a lot of biomedical scientists and they often tell me that it was strongly discouraged to continue on from your undergraduate institution to the same graduate school. That in the sciences, they wanted to . . . in the biomedical sciences, they wanted to see people diversify, be exposed to different ways of thinking and like that. Did you receive any counsel not to go to Yale?

LOVEJOY: I certainly did get some of that, and having a fellowship in hand is what swayed the day for me.

CARUSO: Okay. So, how was it transitioning from undergraduate to graduate? I mean, I guess, in many respects, it was probably quite simple since you had already been spending a lot of time with faculty and grad students. But you do wind up needing to take on different responsibilities as a graduate student, right? You've mentioned the teaching fellowship or that you were going to be responsible for teaching undergraduate courses. What was it like starting as a graduate student at Yale? How many people were in your class? Was it all male, as it turns out, or were there women in your entering class? What was that first semester like as a Yale graduate student?

LOVEJOY: Oh, there were definitely, definitely women in entering class. A lot of interesting young people and good friends to these very days.

CARUSO: About how many people in your entering class?

LOVEJOY: I don't have a clue and that's because I guess by that point, it may have actually become the biology department. So that would have included a lot of molecular biology and **<T: 60 min>** kinds of biology which were fairly distant from what I was interested in. But there was a healthy group of people in ecology and evolution around Hutchinson and others, including the faculty at the Peabody Museum.

CARUSO: [siren noise] Sorry, I just had a little noise in the background. What was your first year like as a graduate student? Were you taking courses? Were you moving into working directly with Hutchinson? And since you . . . was the teaching component part of your first year, or was that going to be in subsequent years?

LOVEJOY: The teaching component was part of that first year, so I taught ecology with John [Langdon] Brooks, and I taught ornithology with [Nelson] Philip Ashmole. And that, you know, that makes you grow up fast, so that was [a] really great experience. I probably took ecological principles from Hutchinson that year, which is enough to stir up anybody's mind, so it was a good first year.

CARUSO: Can you tell me a little bit more about what it was like transitioning into a teaching role? It's not always the easiest transition for some. Leading a classroom is different from obviously being in the classroom, so how did you go about becoming a teacher?

LOVEJOY: Well, you know, it's a little bit scary. But basically, you know, I just prepared. So now I had my lectures all worked out in advance, and they were two subjects I loved so that was fun in itself. It was a very worthwhile experience.

CARUSO: And you mentioned that you were co-teaching those classes. Was the other individual also a graduate student, or was it a professor?

LOVEJOY: In both cases, it was a professor.

CARUSO: And so what was the professor's role with regard to those classes? Were you co-teaching them where each one was taking a lecture? Were you the lead lecturer and the professor was there just to be, kind of, a supervisor? What was the relationship like?

LOVEJOY: So basically, we taught them together. We, you know, did different lectures, different topics.

CARUSO: Okay, so you split things up?

LOVEJOY: Yeah, I was really pretty much given my freedom to do what I thought I should do.

CARUSO: And what level undergraduate course was it? Was it for entering freshmen? Was it upper-level courses?

LOVEJOY: I would say both of them were upper-level courses.

CARUSO: Okay. Since you had mentioned that this was around the time when Yale started to allow female undergraduates, I was curious if you were teaching co-ed classes, but if they were upper-level, then it would probably be male-dominated classes at that point.

LOVEJOY: It still was, yeah.

CARUSO: Okay, so that was your first year in graduate school. You mentioned taking a class with Hutchinson. Did you have an idea of what it is you wanted to study for your research when you started graduate school, or was that something that you were letting yourself discover as you engaged with the faculty and took the courses?

LOVEJOY: Well, I actually did have a very definite idea because I'd had some time in East Africa because of my time in Egypt, and I was just totally besotted by the fauna and flora of East Africa and had actually been thinking about doing some kind of thesis on the montane forest birds in East Africa. **<T: 65 min>** And it was in January of that year, I think, that my former freshman advisor was back on a visit to the Peabody, and he says to me, "I think if you write a letter to Wilbur [G.] Downs at the Rockefeller Foundation, you could get the money to spend the summer with me in the Amazon." And I did, and I got it, and I never looked back.

CARUSO: So, can you tell us a little bit about that first experience in the Amazon?

LOVEJOY: Yeah, no, it was amazing; the Amazon was 97 percent intact. And it's really big. Most people don't realize how big it is because of the Mercator projection, but the Amazon is

essentially equivalent to the forty-eight contiguous US states.[4] Our entry point was at the port city, Belém, [Brazil], which means Bethlehem [in Portuguese], where the Rockefeller Foundation had a virus laboratory [Belém Virus Laboratory]. When the Rockefeller Foundation was established [in 1913], one of its major purposes was to rid the world of the great scourges, and at the top of the list was yellow fever. And they actually did an amazing job of controlling yellow fever. There was even a twenty-year period when there was not a single case of yellow fever in Rio [de Janeiro, Brazil], and that was all achieved by eliminating potential breeding places for Aedes aegypti. And in the course of all of that, they discovered there's just a wealth of other arthropod-borne viruses circulating in nature, any one of which could turn out to be, you know, an important disease going forward. So they set up a series of laboratories around the world with good lab people for the laboratory work but also good naturalists for the ecological side of the studies. And so I actually minored in epidemiology and public health and, as a consequence, I was not in the least surprised by what happened around COVID-19. It was a totally predictable event. So I had a lot of background in all of that, and basically for my PhD, I started bird banding in Brazil and netted and banded birds for two years in different kinds of forests. And all those birds, you know, as we were handling them to band them, we also took a small blood sample from, looking for viruses or antibodies. And I ended up basically with two PhDs' worth of data, and I couldn't obviously write two PhDs, so that epidemiological data got turned over to the virus laboratory, but that was my base and that's where Phil Humphrey, my freshman advisor, took me that first summer.

CARUSO: So you spent about two-and-a-half months down there?

LOVEJOY: Yeah, probably June, most of June and July. Maybe a little bit of August.

CARUSO: Okay. And how many other individuals were on that research trip?

LOVEJOY: So Phil's son, young son [Steve Humphrey], was part of that trip and a friend of his. Other than that, we were, you know, collaborating with our Brazilian colleagues. **<T: 70 min>**

CARUSO: So where were you . . . obviously you mentioned going out and capturing birds in different locations and tagging them, but was there a, sort of, core base of operations that you were working out of?

[4] Mercator projection is a cylindrical map projection created by Gerardus Mercator in 1569. Due to its shape, countries and locations farther away from the equator are seen as larger than countries and locations closer to the equator. See "Mercator Projection," *Encyclopedia Britannica*, September 11, 2018. Accessed at https://www.britannica.com/science/Mercator-projection on 9 December 2021.

LOVEJOY: So, in those days, we—in a sense—we operated out of the virus laboratory. That was our base, but we didn't have offices there. And we basically took care of all of our field notes and all of that where we were staying close to our field sites.

CARUSO: So this was just like living in the Amazon then? Not like taking day trips in and then hiking back out but just living there, kind of, continuously?

LOVEJOY: Yeah, so we weren't actually living in the forest, but we were living very close to the forest.

CARUSO: Okay, and so you had to get your own supplies, make supply trips—things along those lines, and it was just the four of you?

LOVEJOY: Yeah, well, basically, we had the support of the Belém Virus Laboratory for all the field support that we needed, so equipment and supplies and all the rest of that. We also had the collaboration of the curator of birds at the big natural history museum in Belém, the Museu Goeldi [Museu Paraense Emílio Goeldi], which was really helpful because there was no field guide to the birds. So the curator of birds was the closest thing you could get to a field guide, and, you know, all our logistics support came from the virus laboratory.

CARUSO: And so, then each day during this two-month period, you . . . the four of you would head out together in the morning, hike somewhere, tag birds, and then hike back out?

LOVEJOY: Yeah, well, we would drive out to the research sites—be driven out—and basically get there before dawn, open the nets, you know, just as dawn was breaking and spend the rest of the day taking birds out of nets and banding them and taking the blood samples and all the rest and then, sort of, around four o'clock, we would fold it all up and head back to where we were staying.

CARUSO: And then what did you do in the evenings—just went through your data?

LOVEJOY: Yeah, we went through our data.

CARUSO: And was this seven days a week?

LOVEJOY: Close to seven days. We had Saturday night off.

CARUSO: And what did you do with your Saturday nights off?

LOVEJOY: We basically went out with some of the Brazilians from the laboratory.

CARUSO: So, what was . . . [crosstalk] Sorry, go ahead.

LOVEJOY: Well, you learn the culture and Portuguese pretty quickly.

CARUSO: I was going to ask what it was like being in that type of cultural environment since, I mean, you'd mentioned taking a lot of French but, you know, probably not too much overlap. I can't think of . . . I don't think French and Portuguese have too much in common in terms of language.

LOVEJOY: They don't.

CARUSO: So, you know, did you pick a Portuguese as a language or just bits and pieces of it while you were there?

LOVEJOY: I would say that first year it was bits and pieces, but, you know, when we were living in Belém for two years, you learn the language.

CARUSO: So I know it's almost two o'clock and you have another meeting, so this might be a good point . . .

LOVEJOY: I sent a message that I was not going to make that one.

CARUSO: Oh okay, so we have more time?

LOVEJOY: Yeah.

CARUSO: All right, great. So your first summer on this expedition, you collect a lot of data, you come back to Yale. What's the next step for you in terms of pursuing your degree?

LOVEJOY: So I was actually thinking about what kind of question I could address, and there was, you know, the set of questions around the epidemiology, but then there's **<T: 75 min>** questions about . . . you're dealing with two or three hundred species of birds, so what determines which species you're likely to catch in any given net? So I was thinking about how to get at that and thinking about it in terms of the physical structure of the trees. And then, as it turned out, Phil Humphrey persuaded the Brazilians to create a field station around where we were working and so partway through, all of the sudden, I had the identifications of all the trees around the nets I was catching birds in. And that was much too good of a windfall not to take advantage of it. So in my analyses for my PhD, one of the things I looked at was the relationship between bird species diversity and tree species diversity and different kinds of forests at the mouth of the Amazon.[5]

CARUSO: And in terms of support for your graduate research, was that something that was coming through the university, or was that something that you were applying for from other research institutions like the National Science Foundation [NSF] or other organizations?

LOVEJOY: Yeah, so it's the latter. It came from the Air Force Office of Scientific Research, which was very interested in how you could use a mist net to catch birds as a survival tool in a tropical forest delta because we were very involved in tropical forest deltas in the other side of the world, right? So that office supported the fieldwork all the way to the end and then didn't produce the funds for the analysis, so I didn't have to do that, and I could . . . was able to just concentrate on the biological question.

CARUSO: How soon after returning from that first summer were you able to get the funding to travel back there?

LOVEJOY: That's a good question, and I'm pretty fuzzy on it, actually.

CARUSO: Okay, because I know that you finished your degree at Yale in '71, and so I was just wondering since you had spent two years . . . . I guess I was making an assumption that you spent two years doing the research, then came back to work on writing up your thesis, but . . .

[5] An abstract to Lovejoy's work can be found here: "Abstracts," *American Zoologist* 12, no. 4 (November 1972): 711. Accessed at https://www.jstor.org/stable/3882007 on 31 May 2022.

LOVEJOY: We actually lived there from ’67 to ’69.

CARUSO: Okay, ’67 to ’69. Okay, so there for two years and then you were back in the states for two years writing up your thesis?

LOVEJOY: Right, and learning about computers because there was such a big dataset.

CARUSO: How was it learning on those early computers?

LOVEJOY: Well, if you had somebody to coach you like I did—Tom [Thomas G.] Siccama, from the forestry school—it worked pretty well. If I’d had to do it totally on my own, I don’t know what would have happened.

CARUSO: These are the large mainframes with punch cards?

LOVEJOY: That’s right. I had twenty-five thousand individual punch cards, each one of which represented a bird in a net on a particular day.

CARUSO: And if I remember correctly, those punch cards if you drop them . . . like they had to be in a particular order and if you messed up that order, you essentially ruined your dataset?

LOVEJOY: That’s true. **<T: 80 min>**

CARUSO: Okay. So is there more to tell about the two years that you spent in the Amazon doing the research, or was it essentially just the same thing that you’d been doing over that summer slightly modified given your current research question?

LOVEJOY: Well, yeah, so it was basically I was driving it, and it was pretty big thing to actually manage, but I managed to do that and managed to get back with all the data, which were not on punch cards at that point. So, every time a bird was taken out of the net, there was a form that had to be filled out and various bits of information included in that. And since each bird had its own individual bird band, you could actually trace individuals.[6]

[6] Thomas E. Lovejoy, “Birds and Viruses in Lower Amazonia,” *Eastern Bird Banding Association News* 30, no. 3 (1967): 116-122. Accessed at https://sora.unm.edu/node/151122 on 31 May 2022.

CARUSO: So for this project, you were managing a team it sounds like. Is that correct?

LOVEJOY: Yeah, a small team.

CARUSO: Who was on your team?

LOVEJOY: On the team with myself, a research assistant from the virus laboratory, who I don't think had a lot of formal education, but he was really smart about how you get things done, and so he provided the logistics, but, you know, basically, we ran about a hundred nets a day, so that was a big setup effort. It was also a big maintenance effort. We also had nets that you could pull off into the canopy of the forest and catch birds that would never come lower than that. And then, of course, all the blood samples had to get back and be kept cool and get to the laboratory promptly. So anyway, so the team was me, that assistant, Geraldo Pereira da Silva, Fernando Novaes, the curator of birds from the Museu Goeldi participated. So we were essentially the core team, but there were two or three other Brazilian assistants who helped run the nets, take birds out of the nets, and, you know, put a form in the bag with the bird so you knew which net it came from and what time. So it was a little team, and it worked pretty well.

CARUSO: And so, were you holding similar hours and schedules to when you were there that first summer—in at dawn, out at four most of the days, taking Saturday evenings off?

LOVEJOY: Yeah, so we did . . . When we were there for two years, we basically did that three days a week, and the other days were devoted to making sure that all the data was appropriately recorded and tabulated and locked down. So we would do long field days on Monday and Tuesday and a long field day on Friday.

CARUSO: And any other time that you had in the area, were you going out and exploring the culture, or was it really focused on getting all the research done?

LOVEJOY: Well, mostly it was focused on getting the research done, **<T: 85 min>** but we actually lived in the city as did the various scientists who were part of the virus laboratory, etc., so we certainly spent time together in different kinds of ways, but always in association with our Brazilian colleagues. It was very much a binational exercise.

CARUSO: And while you were there for those two years, obviously you're gathering a lot of data, you have a lot of information. Did you start thinking about how you were going to be constructing your thesis at that point? Did you begin writing chapters during that period, or was it purely data collection for you?

LOVEJOY: So it was pretty much purely data collection, and the godsend of getting all that tree data didn't come until, sort of, halfway through that time.

CARUSO: The two-year period—was that just the amount of funding that you had to stay there, or is it clear that at some point you had enough data and you could then return to start working on your thesis?

LOVEJOY: I think we concluded that you would have a substantial amount of data after about two years, and it was. I mean, it was a huge dataset for its time. So however many pixels there are in one of those punch cards—it's like eighty, I think—so it's like eighty times twenty-five thousand, right?

CARUSO: So, yeah. The . . . during this time, were you remaining in contact with your advisor at Yale, and, if so, how frequently, and what were you communicating?

LOVEJOY: Oh, well, the answer is yes, but not as frequently as probably I should have because there was just so much to do day-to-day keeping it all going. But we did go back for two weeks in the middle, and I did have a chance to sit down and talk with him then. And I can't remember at that point whether the tree data that actually fallen in my lap yet. Maybe not.

CARUSO: Okay, so after two years in the field, you wrap up the expedition and you return back to Yale University. You needed to sort through your data. You mentioned working with . . . getting the assistance of an individual with computer data processing your datasets. What else was going on for that two-year period that you were working on your thesis? Did you have other teaching responsibilities? Did you need to be doing other forms of work around the university? Were you doing any mini projects during this period of time, or was it really an intense period where you were analyzing and writing up the data?

LOVEJOY: Well, I certainly was doing a few other things, but I basically, you know, was, sort of, inexorably moving forward, accumulating all the relevant literature, and so there came a point where all I to do was sit down and write it. And I was not a very nice person to know for about three weeks, but I basically wrote it in three weeks because I'd done all the prep work.

CARUSO: And then, **<T: 90 min>** so this was roughly 1970ish, ’70, ’71 when you were writing it up?

LOVEJOY: Yeah, ’70, [completed in] ’71.

CARUSO: Okay. At that point, while you were in the time leading up to writing the thesis or while you were actually writing it, did you have a plan for what the next step of your life was going to be?

LOVEJOY: Well, the answer is actually no, but I was, you know, exploring various possibilities.

CARUSO: What were you considering?

LOVEJOY: One of which was to go to the Academy of Natural Sciences in Philadelphia, [Pennsylvania], as assistant to the president, and that fell apart at the very last minute after we already had a house in Philadelphia and blah blah blah blah blah. So I got a half-time job at the university advising students, so I could pay the orange juice bills, right? And then a year later, I was brought into the administration of the Academy in various ways, including fundraising. It wasn’t really a great experience for anybody. And suddenly, you know, suddenly the Academy was in serious financial trouble, and so therefore, I was on the to be cut list, and that’s when I began writing a bunch of letters and got a note saying the World Wildlife Fund United States was looking for a project administrator.

CARUSO: So a couple of questions, follow-up questions. You used the word “we” when talking about Philadelphia. Were you married at the time?

LOVEJOY: Oh yeah, so I should have included my wife [Charlotte “Mopsy” Seymour Lovejoy] is one of those who went out to the field a lot with us. Yeah, so I alluded to it very early on, so . . .

CARUSO: Right, your brother-in-law was the other students that went to . . . yeah.

LOVEJOY: Yeah, so we got married in January of [1966]. I have to double check that. And so we ended up living in Belém. We had twin daughters who were born in Rio because we actually

fairly wisely decided not to have the birth in Belém. And so, yeah, so we were a family that spoke Portuguese, and two little girls who are now fifty-something, one of whom still speaks Portuguese. So, it was an interesting adventure all around.

CARUSO: So, I mean, what was it like doing this research while also having family around?

LOVEJOY: It was not as scary as perhaps we should have realized, right? But, you know, they were relatively healthy, and the one really scary moment was just after they were born, and we flew back to Belém from Rio, and then Mopsy—which was her name—Mopsy got sick, and it eventually turned out that somehow in transitioning from the hospital in Rio to Belém, **<T: 95 min>** somewhere in all of that, she had picked up typhoid. And that was a much more serious disease to have in those days than it is today. But all's well that ends well, of course. And so we basically . . . we managed pretty well as a family, then all came back to New Haven, [Connecticut], in August of 1969.

CARUSO: And so you and your wife had met as undergraduates or as graduate students . . . when you were an undergraduate or when you were a graduate student?

LOVEJOY: So I had met her just after she had graduated from Smith [College], which would have been my year of graduation if I hadn't taken the year off. Her father was [an] art historian [Charles Seymour, Jr.], and it was an era in which people had Sunday dinner, and professors would invite students to their Sunday dinner, so I got invited, and there was this wonderful, lively woman about to go around the world with a friend, just exploring the world. And I thought to myself, "Well, that's interesting" and then basically forgot about it. And then a year later, when her brother is back from the same expedition that I had been on, I got invited again, and there she was. And within two or three months, I had popped the question, and we were on our way to getting married.

CARUSO: Wow. That was fast. So you return to Yale in August of '69?

LOVEJOY: Yeah.

CARUSO: With a young family. How old were your daughters then . . . roughly two?

LOVEJOY: They would have been about a year-and-a-half.

CARUSO: Year-and-a-half, so about eighteen months old. You're settling in, analyzing your data, as you mentioned, you know, maybe for a three-week period, no one should have been talking to you while you wrote up your dissertation, defended your . . . then you subsequently defended your thesis, you stayed at Yale because the position at the Academy of Natural Sciences fell through at the last minute. Then—

LOVEJOY: We had already moved.

CARUSO: Oh, you had moved. Right.

LOVEJOY: So we were already in Philadelphia, so somebody found this half-time job advising premedical students at the university, which, sort of, kept it all together.

CARUSO: University of Pennsylvania?

LOVEJOY: Yeah. I was co-chairman of the premedical advisory board, and its job was to write letters of recommendation. There was no board; there was one other person who was the other co-chair, and we just did it.

CARUSO: And where in Philadelphia were you living? In the city itself or one of the suburbs?

LOVEJOY: In the far corner of the city in Chestnut Hill.

CARUSO: Oh, okay. Nice area.

LOVEJOY: It was beautiful. Still is.

CARUSO: Then you do wind up working for the Academy of Natural Sciences, not in the best position . . . best fit position, and they ran into financial difficulty, and so you wrote letters, and the World Wildlife Fund was interested in hiring you as—I think according to your CV—it's a . . . hiring you as a program director.

LOVEJOY: Yeah, originally it was as project administrator and then it became program director, and you know, I was employee number thirteen.

CARUSO: Okay, is this . . . so I asked you a little bit earlier about, you know, did you have a sense of what it is that you wanted to do next in terms of your career? Did you see yourself working as university faculty? Was that going to be your ultimate goal, or were you relatively flexible in terms of where you were working as long as you got to do the research that you wanted to do?

LOVEJOY: Yeah, so I had thought about it, but not that hard. **<T: 100 min>** Basically, I just wanted to have scientific adventures and come back to whatever institution supported me as infrequently as I could get away with. And so I'd thought I go to the World Wildlife Fund for two years and then go back on the science adventure track.[7] And then I began to find it all so intrinsically interesting and increasingly understanding the importance of it that I ended up staying for fourteen years.

CARUSO: Did you . . . so when you took the position at the Wildlife Fund, did you . . . were you getting any advice from faculty at Yale about your career choice? I ask in part because again interviewing those in biomedicine, chemists, there are different feelings about individuals who receive a PhD in the sciences going into nonacademic positions. In some disciplines, that is relatively normal. Going into industry, for example, is pretty common so there's . . . it's not a big deal. In some disciplines, if you're going . . . if you want, we can take a short break if that would be helpful.

LOVEJOY: I'm fine.

CARUSO: Okay, in some disciplines, if you venture outside of the academy, you're essentially a traitor to the true scientific life. Was there any of . . . anything expressed to you about your decision to take a position with the World Wildlife Fund?

LOVEJOY: So, clearly, it was an unusual thing to do. And, you know, the initial decision was not meant to be a fourteen-year decision. It was meant to be a two-year decision. But the recommendation came from the assistant secretary of the Smithsonian [Institution], David Challinor, who had been assistant director of the Peabody Museum at Yale under [S.] Dillon Ripley. Dillon Ripley was secretary of the Smithsonian, a legendary secretary already, and he happened to be chair of the board of the World Wildlife Fund. So, all my mentors over time, all had some encouraging things to say about doing time in conservation. So, what I decided to do was, in fact, keep closer to my academic roots than others might have realized I was doing and look at ways I could apply those for the benefit of conservation. You know, that's how I got so

[7] See World Wildlife Fund, https://www.worldwildlife.org/.

engaged in what turned into conservation biology. I knew there had to be an undeveloped science behind conservation. And so I actually had an outline of a meeting that would discuss that when Michael [E.] Soulé sent a graduate student, Bruce—I'll think of his last name in a minute—to ask me for five thousand dollars from the World Wildlife Fund to have the first meeting on conservation biology. And I said, "Well . . ." Bruce Wilcox.

And I said, "Well, that's interesting. I've been thinking about that, too." And I reached in my desk drawer and pulled out my outline of what I thought should be in such a meeting. And so, all of that was happening at a really fascinating time in Washington, [DC], when environment was basically a **<T: 105 min>** bipartisan priority. There were a lot of moderate Republicans under [Presidents Richard M.] Nixon and [Gerald R.] Ford who cared about the environment and conservation. And so it was basically taking advantage of the can do, can make a difference environment of Washington, and some of the really bright people attracted to the World Wildlife Fund that led me to stick with it.

CARUSO: So, can you tell me a bit more about what your responsibilities were in your . . . so I have listed the program director position. You said that it started as a project administrator position, but you eventually rose to the vice president for science and then the executive vice president at the organization. Can you tell us a bit about what your responsibilities were in each of those positions, and what it is that you were trying to accomplish with the resources that you had at your disposal at the World Wildlife Fund while you were moving up the ranks of the organization?

LOVEJOY: So, in the early, early times at WWF, my job was basically to review written proposals and decide which ones to recommend to the board that it approve for funding. The World Wildlife Fund didn't do anything itself; it was viewed simply as a funding mechanism. And, at the end of the Ford administration, Russell [E.] Train [second administrator for the US Environmental Protection Administration (EPA)] left government and pretty quickly was identified as the person WWF should try to get as their new leader [in 1978]. And Russ's attitude was WWF is only going to be really meaningful if it's able to do things itself, not just give money away. And that was a very insightful observation, and he basically executed that. Interestingly enough, I had been fiddling around trying to figure out how to move forward on the topic of habitat fragmentation, which hadn't been considered as a serious conservation issue at all, ever. When I finally realized that maybe you could have a giant experiment to actually understand this in Brazil in the Amazon where 50 percent of the forest was required to be left intact. So the proposal was, you know, I wonder if you can persuade the Brazilians to arrange the 50 percent to have a giant experiment where we know what's in the forest before it becomes fragmented. And we then fragment it in different sizes of fragments and follow what happens as a consequence. And so, among other things, that helped WWF become associated in people's minds with actually doing science, not just giving money away, and I think was very important in the beginning of the science of conservation biology. So I just go into all of that because it tells you that I never got that far from science—the way I thought about things. I would never have succeeded at tenure at most universities **<T: 110 min>** in the first part of my career

because when you do something long-term like the fragments project, it's decades before you get results. And yeah it's, sort of, interesting, you know, now that this is all history, it all makes sense in a context. Nineteen . . . 2021 is the year that I got elected to the National Academy of Sciences.

CARUSO: So, it took a . . . it was a very long-term model.

LOVEJOY: Yeah.

CARUSO: When you were . . . so when there . . . could . . . sorry. What was roughly the time frame where the World Wildlife Fund transitioned into doing science itself, not just funding it?

LOVEJOY: So, I would say that probably started in the late seventies.

CARUSO: Late seventies, so, while you were still a program director or after you moved on to the vice president for science position?

LOVEJOY: So, I may have moved up to vice president pretty soon after Russ Train became president. Anyway, it was a fascinating time in which you could really change the world, and we worked really hard at it.

CARUSO: So I asked my question in part because you'd mentioned that, you know, you had these aspirations to go out on these scientific adventures still. I assume that meant traveling around and doing experiments and studying things, but now you move into a position where, at least, for five or six years, that wasn't your job; that was someone else's job, right?

LOVEJOY: Well, yeah, that's completely true. There was a big moment of truth in my life when I realized that this big project I had started up in the Amazon was not going to be my way of getting back into spending a lot of time in the field—that if you wanted to be successful with a project like that you actually had to lead it and manage it, not be a participating scientist.

CARUSO: How was it accepting that truth?

LOVEJOY: Well, you know, when it was staring me in the face, it was obvious, right?

CARUSO: So, in those years that you were the director, you were still essentially just supporting proposals, right? So this was making sure that projects were getting funded and supported appropriately. Was anyone sending you data to look at? Was anyone turning to you for advice on the projects that the WWF had funded?

LOVEJOY: So I think all of the above was happening, and I was spending a lot of time going to scientific meetings and visiting universities, snuffling around to find people who were doing things which could turn into conservation biology, so science was always there consciously all the way through.

CARUSO: I forgot to ask where . . . was the WWF-US based in Washington, DC?

LOVEJOY: Yeah.

CARUSO: Okay, so I assume you moved from Philadelphia to Washington?

LOVEJOY: Yeah, so that was . . . that happened pretty quickly [. . .] in 1975.[8]

CARUSO: Okay, yeah, I mean . . . I know, I mean obviously President [Joseph R.] Biden when he was a senator commuted from Delaware to DC on a regular basis, but probably not the easiest thing to do. Philadelphia isn't, you know, that much farther than Wilmington, [Delaware]. I think that's where—

LOVEJOY: Yeah.

CARUSO: But I wanted to check to see if you'd move to the DC area.

LOVEJOY: Yeah, so within a couple of years, you know, we were based down here.

CARUSO: Okay. So, what was the . . . what were your responsibilities **<T: 115 min>** as the executive . . . as the vice president of science for the WWF?

[8] The audio is not completely clear here, and we were not able to ask the interviewee for clarification.

LOVEJOY: Well, it was basically to try and help establish priorities of the things we would do and the things we wouldn't do. And at the beginning, our focus was science, tropics, and new world because there was no other organization actually active in the new world. Well, that didn't mean that all of the World Wildlife Fund did what WWF-US did, of course, but Russ Train eventually grew it beyond being a new world organization. But in the meantime, I'd spent a lot of time, sort of, knocking around Brazil and other parts of Latin America developing conservation interests and projects, so WWF-US has very strong roots in countries like Brazil.

CARUSO: And so, you spent about . . . let's see, seven years in that position as the vice president for science and then in 1985, you became the executive vice president of the organization. And so, how did your responsibilities change once you were in that position?

LOVEJOY: Well, you know, the interesting thing is I don't think they changed a huge amount, and I mean we had some extraordinary staff involved with, you know, other aspects of running an organization like the finances and the rest, the fundraising and the like. So my role was basically more focused on the conservation product.

CARUSO: Okay. And were you traveling as much as you had been when you entered that position, or was that much more DC-based, DC-focused?

LOVEJOY: Well, it's a really good question, so I love to travel. I'd go anywhere in a heartbeat, but I had decided that that was not a very responsible way to be executive vice president. And, in particular, I noticed how effective Dillon Ripley had been engaging with India as if it was his other country. So I decided that it would be good for WWF to have a lot of staff developing those individual relationships, and I would just stick with Brazil.

CARUSO: So that just became your focus?

LOVEJOY: Yeah.

CARUSO: So you made some trips there or—

LOVEJOY: Yeah, it was my personal focus and my travel focus, but it was not the total focus of what I worried about as executive vice president.

CARUSO: Okay. So why did your time at the WWF end? I know that you moved on to the Smithsonian after your time there. What brought about that transition in your life?

LOVEJOY: So, you know, I'd always actually wanted to go to the Smithsonian and very much inspired by Dillon Ripley and his ability to make things happen. So any time that, sort of, became a possibility, I'd at least look at. And in this particular case, what happened was Ripley's **<T: 120 min>** successor, Bob [Robert McCormick] Adams, decided that you really needed somebody in the Smithsonian hierarchy who could deal with the immense array of external relationships the Institution had and still has. He decided . . . he and his wife, Ruth Adams, decided that maybe I was the ideal person to do that kind of thing. So that's how it got started and how it happened.

CARUSO: So you entered the Smithsonian as the assistant secretary for environmental and external affairs? Is that correct?

LOVEJOY: Well, when I entered, it was just external affairs.

CARUSO: Okay. So what were your responsibilities in that position?

LOVEJOY: Any unit of the Smithsonian that dealt with the outside basically reported to me. So that's fundraising, it's the National Associates program, it's the magazine, it's the television, it's the radio, it's intergovernmental affairs. You can imagine that the list gets really long.

CARUSO: And so what were you doing with all this information coming in to you about these external affairs?

LOVEJOY: So basically, they . . . all those units had never actually interacted together until this structure existed. And so we would have, you know, I can't remember now, but let's just say monthly meetings of the heads of all those units and just by sharing the priorities of each unit at the time, various possibilities would arise that otherwise wouldn't have been paid attention to.

CARUSO: So what were some of those interactions that proved quite fruitful for the Smithsonian with this new external affairs position and bringing all these groups together?

LOVEJOY: Well, you know, one of the things we did was there was a National Associates organization, and basically anybody who subscribed to the magazine was a National Associate, so at one level it did not have a lot of meaning. But they created a board for it and some former Smithsonian regents became members of that board. And finally, at one point, I think it was when Lloyd Schermer was starting as chair, that it became actually a serious effort to engage the National Associates in ways that were really helpful to the Smithsonian and that's not just, you know, giving money but good advice because all these people come from different parts of the country, and they have important perspectives that they can bring.

CARUSO: Sorry, I'm just quickly scrolling through your CV. So you were in that position—

LOVEJOY: So the reason it got changed to "and environmental" is because the Congress discovered there was somebody at the Smithsonian who was really pretty knowledgeable about environmental issues. They began beating a path to my door, starting with Tim [E.] Wirth, then senator from Colorado, and so Bob Adams just thought the sensible thing would be to formalize that in the actual title.

CARUSO: So, do you remember roughly when that title change happened? **<T: 125 min>**

LOVEJOY: So, I'm going to guess. So, Tim led a memorable congressional delegation to Brazil in January 1989 along with John Heinz, senator from Pennsylvania, and Al Gore, Ben [Benjamin C.] Bradlee from the *Washington Post*—it was really an amazing group. And like two weeks before the trip was about to happen, the head of the rubber tappers, Chico Mendes [Francisco Alves Mendes Filho], is assassinated in Brazil. He was assassinated on the twenty-second [of December 1988]. It was in the papers in Brazil on the twenty-third. Marlise Simons of the *New York Times* wrote it up and persuaded the *New York Times* to put it on the front page on the twenty-fourth. And, in a sense, the most important newspaper in Brazil was the *New York Times*, so suddenly, our whole trip was being looked at in a very, very different kind of way. And none of this, of course, was planned; it just, sort of, happened and became logical next steps. So we did that trip. And as one Brazilian journalist based in New York actually said to me afterwards, he said, "You know, you came that close," and he, sort of, gestured at sort of a quarter of an inch, he said, "You came that close to going too far, but you didn't." So we were really very careful not to say inappropriate things about Brazilian sovereignty. That was, you know, my advice, which was adhered to impeccably by Tim and others.

And the head of the Brazilian foreign ministry at the time was somebody who [I] had actually already knew and had briefed on the environment a couple years before at his request and later went on to be ambassador here in DC and very good friend of Tim's and of mine. And about ten years ago or something like this—the last time I saw him—he said, "You know, when you and Tim came, that's when I decided the Earth Summit should be in Rio." So that really changed Brazil for quite a while. And, you know, the senior diplomats in the foreign ministry to

this day are the ones who were young diplomats then and really enjoyed Brazil being a hero country as opposed to being a pariah and they'd like to see it get back to that. We shall see. But, anyway, so suddenly I was thrown in the middle of all of that; it's not like I set out to make it happen. And that certainly was environmental affairs, so that's why Bob decided it would make sense to actually explicitly include it in my title.

CARUSO: In part, I was asking the question because thinking about broader politics at the time that would be [George H. W.] Bush's presidency, so coming out of [Ronald] Reagan going into Bush, but pre-[Bill] Clinton and usually, you know, we don't think of . . . or at least I . . . maybe I don't know Bush's record on environmentalism in the United States, but I, kind of, assume that the environment wouldn't be necessarily something he would be interested in, but since you mentioned that this was Al Gore and a few others **<T: 130 min>** who were interested in Brazil, I guess it makes more sense that the title transition actually happened at that period of time.

LOVEJOY: Yeah, and so the interesting thing is that trip hurried back to be in Washington so John Heinz could go to Bush's inaugural ball. So, all of this was happening essentially at the same time, and then [D.] Allan Bromley [President G. H. W Bush's science advisor and director of the White House Office of Science and Technology Policy (OSTP)] decided he'd like you know me to be on PCAST, so one of the really interesting things was that [G.] H. W. Bush really thought science should be an integral part of how government works and to make that point, he actually had the first formal meeting of PCAST up at Camp David, [Maryland]. It wasn't very long, but he had it, and he made that point.

CARUSO: So I guess this might be a good point to focus a bit more on PCAST itself, and I think what I'll do is since Kenny's more of the expert on PCAST, I'll, sort of, turn the questioning over to him if that works for you, Kenny.

EVANS: Oh yeah, absolutely, and I guess also want to say if . . . I guess we're two-and-a-half hours in or something. If anyone needs . . . if you need to take a break or . . . we're at an okay pausing point.

LOVEJOY: Yeah, I think we're not going to get it all done today.

CARUSO: So then would it be beneficial to wrap up for the day at this point and then at the next session pick up with PCAST? Does that seem like a good end and beginning point?

LOVEJOY: Well, I'm happy to get started a little bit on PCAST so that everybody's juice is flowing.

EVANS: Sounds good. Well, I guess I'm curious if you . . . you know, you mentioned this is when Dr. Bromley decided you were a good fit for PCAST, if you had had a relationship with him previously and what that recruitment process was like?

LOVEJOY: Yeah, so actually, I had been on the predecessor of PCAST, the White House Science Council, for like a year, year-and-a-half at most [during the Reagan Administration], which basically went out of existence when PCAST was created. So, I had already, sort of, got some attention from government officials as to what I was doing around environment. And I'm trying to remember now the name of Allan's predecessor. It'll come to me.

EVANS: Was it [William Robert] Graham or [George A.] Keyworth [II]?

LOVEJOY: Graham—Bill Graham. So that wasn't very long, and I didn't actually get a lot done, but I was there for it. And I'd also served on the binational, blue-ribbon Brazil-US committee on science that Allan chaired a few years before [Brazil-US Panel on Cooperation in Science and Technology].[9] I don't know exactly when. So your question is where was, you know, that Bush administration on environment? I would say it was cautious about the environment, and there was a big conference going on about climate change just as we, you know, were sworn in and then taken up to Camp David. And basically, the Bush record on climate change is that it basically **<T: 135 min>** continued to invest in science and research—Global Change Research Program I think came under this—but it wasn't looking for bold policy moves.

EVANS: Was the environment part of PCAST's or even the White House Science Council's portfolio during your time on either council?

LOVEJOY: I don't recall it in the White House Science Council. It certainly would come up from time to time in PCAST's and even population growth did, which was really interesting. David Packard made sure that it came up, and he wrote a personal letter to the president about the importance of dealing with population, but I don't think it budged the needle.

[9] "Statement by Principal Deputy Press Secretary Speakes on the Brazil-United States Panel on Cooperation in Science and Technology," Ronald Reagan Presidential Library & Museum, September 10, 1986. Accessed at https://www.reaganlibrary.gov/archives/speech/statement-principal-deputy-press-secretary-speakes-brazil-united-states-panel on 7 June 2022.

EVANS: I'm wondering . . . well, you know, PCAST and the White House Science Council and all its predecessors were historically largely folks with backgrounds in the physical sciences or engineering or atomic physicists—stuff like that. And you coming in as a conservation biologist, did you . . . I mean what were your, kind of, expectations going into work on PCAST, and what did you think that what was . . . what did you want to bring to the conversation?

LOVEJOY: So on . . . so basically, you know, I hoped to contribute in practical ways. I didn't expect to wag the dog or anything. But in both cases, it was the president's science advisor who decided that it was important to have this represented. So I basically did the best I could.

EVANS: I'm curious in the . . . about just your experience under Reagan. Were there times where the White House Science Council met with the president? In general, I'm not as familiar with the way that that council worked and the type of meetings and the type of activities that you were involved with.

LOVEJOY: So I was on it for such a short period of time during which we did not meet with the president that I simply don't have an answer for you. But my guess is that it did not have anything regular in the way of a meeting. And, you know, even for George H. W. [Bush], it was not easy to carve time in the schedule, but he would join us from time to time and Allan made sure that happened.

EVANS: Yeah. Well, you mentioned this meeting with . . . like at Camp David. What was that experience like for you?

LOVEJOY: Well, it was an interesting meeting because it was basically pretty much a ceremonial meeting welcoming us all to PCAST and Camp David. So, I remember we got there early—I guess we'd had really good drivers or something—and so we caught the president by surprise, but he was very gracious as was his nature and immediately grabbed a jacket and came and joined us. By jacket, I mean something like a baseball jacket. And then he gave us a tour of Camp David, and you can decide what you want to do with what I'm just about to tell you, but we had had some discussion about climate change before lunch. **<T: 140 min>** And I was working up to making a statement, "Well, you know, the best way to understand how climate change will affect the planet is to look at how it's worked in the past, right?" And so, then we take a break and then we go and get ourselves lunch and then we go into a room where there was, sort of, a table on three sides of the room. Obviously, in the middle, it's supposed to be the president and Mrs. [Barbara] Bush, and when I get there, nobody's sitting next to Mrs. Bush, you know, and I was brought up, you know, if somebody doesn't have somebody sitting by them, well, I'll just go over, you know, and say hello. So I did, and immediately John [H.] Sununu came and sat down next to me. I thought that was really interesting, and you can put your imagination to interpreting that. But in any case, it was a cordial discussion; the president

made it very clear that he cared about science. And then, after lunch, we were all sent back to wherever we were supposed to be. I was headed to Puerto Rico for the *Washington Post* retreat, which I hadn't told anybody about. And I think that may have been the extent of the very first meeting. But in any case, the president did meet with us from time to time when he could. You know, very often, it was just for half an hour or an hour, but he made a point of doing it.

EVANS: Were there particular issues in science . . . you mentioned climate change. I'm sure space was a large part of his science portfolio. Were there other scientific issues that he was interested in?

LOVEJOY: So I don't recall any in particular, and it would be an interesting question to ask some of the other PCAST members because they might actually remember some specific things that I don't.

EVANS: You mentioned John Sununu. What was your impression of him? What was your . . . what was PCAST's relationship to him? Was he also at the meetings? I know he probably was helpful in carving out time to meet with the president if he could.

LOVEJOY: So I think PCAST made him nervous. That's my guess.

EVANS: And why do you think it would have made him nervous?

LOVEJOY: You never knew what these scientists would say, right?

EVANS: Did you—

LOVEJOY: But I'm just making an assumption there, right?

EVANS: One thing I've been curious about is the kind of the . . . there was the meeting at Camp David. In these other meetings . . . I don't want to just ask about tone, but more, you know, were these public or private meetings and where were these meetings held?

LOVEJOY: So, most of our meetings were not public meetings, and a lot of them were on the Old Executive Office Building [currently known as the Eisenhower Executive Office Building]. And I seem to remember the Indian Treaty Room at least at some point. But we also met in the

Cabinet Room more than once. And we were certainly there the afternoon that John Heinz was killed in the airplane accident, which I remember very vividly. **<T: 145 min>** And we met once in California essentially as David Packard's guests. And then I think we got sent out individually on the road to have "hearings." And the subject matter is just lost my . . . disappeared from my brain, but I thought it was actually an interesting thing to deputize the individual members to go off and take the temperature around certain subject matters around the country.

EVANS: Did it have anything to do with, kind of, higher education and research universities?

LOVEJOY: So I think that is what I'm thinking about. I think if you get back in the records, you will find that there was a moment when we were all deputized to go to different places.

EVANS: When you said, kind of, "take the temperature," what did you what did you mean by that? What was the purpose of . . . ?

LOVEJOY: Well, rather than go and talk at people, actually draw them out on whatever subject matter it was. So, I remember one of our discussions was very much concerned about how professors tend to teach their graduate students that the only acceptable career as a scientist is to be a professor, and obviously, there are dozens of different ways we need science engaged, not just in the classroom.

EVANS: Yeah, that's right. Were there . . . as part of this, kind of, deputizing process, were there products? Were there . . . did you write reports or letters? Were you involved in any sort of report writing with PCAST at that time?

LOVEJOY: Well, there had to have been—nothing comes to mind very clearly—but I would think there had to have been.

EVANS: Were there other . . . you mentioned David Packard and Allan Bromley. Were there other folks on the . . . other scientists on the panel that you knew or worked with during that time?

LOVEJOY: So one of them was Ralph [E.] Gomory.[10] There was also a woman whose name I'm forgetting for the moment, but who served some time as head of the Red Cross, so just down the street.

EVANS: Was that Dr. Healy?

LOVEJOY: Doctor?

EVANS: Healy. Bernadine Healy.

LOVEJOY: Yes.

EVANS: One of the things our project is interested in, I guess, is, kind of, thinking about if there are . . . if you were chair of PCAST today—so you have a unique perspective—are there things that you think PCAST, as you remember it, were well-suited to do. Are there things you wish you could have done while you were a member or would do now? I guess, kind of, two separate questions. **<T: 150 min>**

LOVEJOY: Well, I don't know quite where this fits, but it has seemed to me for quite some time now that government investment in science has been woefully disappointing. That if we really want to compete in this world, we can't be like number twelve in national investment in science, which is approximately where we are. You know, our big advantage came after *Science: The Endless Frontier* and just very serious investment in science year after year.[11]

EVANS: So, are you saying that, you know, PCAST should have more of a role in budgetary discussions?

LOVEJOY: Well, I don't think it necessarily has to sit there and mess around in the details of the budget, but there probably are some, you know, major points like the one I just made that PCAST is uniquely qualified to comment on.

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[10] Ralph Gomory, interview by Kenneth M. Evans via Zoom, 2 July 2021 (Houston and Philadelphia: Rice University's Baker Institute for Public Policy and the Science History Institute, Oral History Transcript # 1119).
[11] Vannevar Bush, *Science: The Endless Frontier: A Report to the President on a Program for Postwar Scientific Research* (Washington, DC: United States Government Printing Office, 1945). Accessed at https://www.nsf.gov/od/lpa/nsf50/vbush1945.htm on 10 December 2021.

EVANS: Were there . . . I guess, did you . . . you know, after PCAST continued on and continues, you know, to be active. I guess the Biden administration is still piecing theirs together, but have you through the years been, I guess, not necessarily involved but following the work that PCAST has done since that time?

LOVEJOY: So, you know, it isn't particularly easy to follow. So, I'm sure it's doing important things, and I remember it focusing on biodiversity. I guess that was under Clinton, maybe the second term. So I think it would be actually an interesting exercise to go through the agendas of PCAST over the years to see what topics made it and conversely those that didn't make it and see whether there might be some adjustments in order.

EVANS: Yeah, it's a good research question and something we're thinking about. I'd seen these biodiversity reports chaired by Peter Raven during the Clinton era that you'd mentioned. Were there . . . I guess I'm wondering . . . were there things [in] your experience, were there items that you wish that you had . . . I guess I'd already asked this question to an extent, but were there . . . ? I guess now if you . . . well, I guess I already asked this question, but were there other . . . we can wrap PCAST because I know this is, kind of, around the time that you were still working at the Smithsonian at this time. Let's see. Dave, do you have other questions on PCAST that you'd like to ask?

CARUSO: Not at this moment. There may be some that come up later upon reflection.

EVANS: Okay. Well, Dr. Lovejoy, are there other—I guess, from the PCAST time—are there other things that come to mind that you'd like to comment on?

LOVEJOY: Not really, except to tell you a good story, which is that at one point the subject of the Endangered Species Act came up in terms of being renewed by the Congress or whatever, which always turns into, you know, a very dangerous thing to actually engage in. But in any case, so on one afternoon, as a consequence, **<T: 155 min>** in the West Wing in the Roosevelt Room was Ed [Edward O.] Wilson, John Sununu, Allan Bromley, and myself. And when John Sununu understood that Ed Wilson thought all species should be saved, that was, sort of, the end of any real discussion. But he politely said something about having another meeting, which of course never happened. And then in, sort of, a semi-lighthearted, you know, remark at the end of the meeting, he said, "Well, I suppose, the devil is in the details."

"No, sir," said Professor Wilson. "God is in the details."

Isn't that a great story?

EVANS: Yeah, that's great. Well, we've got maybe ten, fifteen minutes left in the three-hour block if I'm doing my math correctly. Dave, I don't know if you think this is a decent time to, kind of, wrap up for the day or . . . and, kind of, schedule a different, a second session.

CARUSO: I mean, that would be my inclination just because it's hard starting a new topic and then not repeating at the beginning of the next session anyway, so yeah, I'd be happy wrapping up now and then picking up from this point next time. So this was . . . Because then I think we'd be . . . when did . . . sorry, when did you time on PCAST end—what year?

LOVEJOY: Well, it ended with the end of the administration [in 1993].

CARUSO: Okay, yeah, so this is when we'd be picking up on talking about your move into the counselor to the secretary on biodiversity and environmental affairs at Smithsonian and then senior scientist position, so it seems like this is probably a good stopping point and then picking up at that point in your career next time.

LOVEJOY: Very good.

EVANS: Great, so we will reach out to you about scheduling a second session.

LOVEJOY: Great.

CARUSO: All right. Have a great afternoon.

LOVEJOY: Thank you very much.

EVANS: Thank you. [. . .]

[END OF AUDIO, FILE 1.1]

[END OF INTERVIEW]

INTERVIEWEE: **Thomas E. Lovejoy III**

INTERVIEWERS: **David J. Caruso**
Kenneth M. Evans

LOCATION: **via Zoom**

DATE: **30 July 2021**

CARUSO: [. . .] All right. So, today's July 30, 2021. I'm David Caruso here with Kenny Evans. We're interviewing Dr. Lovejoy for our second session as part of the PCAST oral history project. Again, thank you for taking the time to speak with us virtually. I'm glad that all of our computer glitches seem to have resolved. As I mentioned before we got started, I wanted to pick up pretty much where we left off. We heard about your time on PCAST, we spoke about your work at the Smithsonian Institution. Can you tell us a little bit about how the opportunity to work for the World Bank came about—and I think that was in 1992—and then we'll move into your work at the United Nations Foundation?

LOVEJOY: Very good. So I had long had . . . or been engaged with the World Bank, particularly around Brazil and the Amazon, going back for like twenty years or more. At that point, the number two person in essentially the Latin American division, Maritta Koch-Weser, who I'd known back from the very beginning of all that engagement with the World Bank and things going on in Rondônia and stuff like that.[12] And she just called me up and asked me if I would come and essentially be their source person for science and the environment. And it seemed like an interesting opportunity; it also seemed like a good time to move on from the Smithsonian. And basically, we found a way to make it work, so I stayed there three years, which was just about right. And one of the things Maritta did was arrange a title for me that had never existed before and never existed after, which is in addition to being the lead specialist on environment, etc., for Latin America and the Caribbean, I was chief biodiversity to the president of the Bank, Jim [James] Wolfensohn, who happened to be a friend, somebody I had known for some years. He really understood what biodiversity was, and he readily agreed to that.

So one of the things that made my position different was that I didn't have to do project work. Most of the people at the Bank end up working on big projects that take a couple years or more to put together, negotiating with finance and other ministries and the country in question until it's finally something that goes to the board of the Bank. I didn't want to get dragged down into that level of detail. I thought the role that Maritta wanted me to play was better if my time was freer, and so that's what we did. And one of the really interesting things we learned is when

[12] Rondônia is a state in Brazil, which is home to a large proportion of the Amazon Forest. See Douglas Daly, "Project Rondônia: On the Ground in Brazil's Amazon Rain Forest," New York Botanical Garden, September 17, 2019. Accessed at https://www.nybg.org/blogs/science-talk/2019/09/project-rondonia-on-the-ground-in-brazils-amazon-rain-forest/ on 10 December 2021.

the NGO community figured out there was essentially one of theirs at the World Bank . . . and by the way, this was constructed so I was still a Smithsonian employee, and the bank was simply reimbursing the Smithsonian for my time. So basically, I was not a Bank person. As I like to say, I did not have the gold handcuffs—neither the gold [nor] the handcuffs. **<T: 05 min>** But when the NGO community found there was an NGO person essentially inside the Bank, that became really interesting to them. And so I think there was a greater level of interaction with the NGO community during those three years than before or after at least for Latin America and the Caribbean. And, you know, there would be occasional things I would be asked to sit on, review—you know, one of these projects coming to fruition like I described earlier. But not in a totally hunched over, kind of, eyeshade kind of way. You know, those documents are sometimes like three hundred pages long, but there would be review meetings, so sometimes I would be part of those, and my job was to ask questions basically around what they could do better from [an] environmental biodiversity point of view. And it was a good experience, but I was ready to move on.

CARUSO: Did the World Bank have offices in DC?

LOVEJOY: The headquarters of the World Bank is in DC.

CARUSO: Okay, and so, when you're holding both positions, were you separating your time between the two institutions, or were you . . . because you mentioned that the World Bank was reimbursing Smithsonian for your time, I didn't know if this was full-time for World Bank, part-time. What was that like?

LOVEJOY: Full-time for the World Bank, so I showed up at the Smithsonian hardly at all.

CARUSO: So then, during your absence from the Smithsonian, was there anyone taking on your responsibilities as senior scientist?

LOVEJOY: So, since my role was—essentially at that point—was chairing [an] environmental council for the Smithsonian, the answer is basically no.

CARUSO: And with your work for the World Bank, you know in our last session, you'd mentioned that you'd hope to get back out in the field and travel and you really enjoyed traveling, visiting places. Did the position at the World Bank also allow for that travel the on-the-ground reengagement, or was this more of an office job at the World Bank for the time that you were there?

LOVEJOY: So I had sufficient flexibility that I could do some travel. And of course, my ongoing forest fragments project still needed attention, right? And so that was just baked right into the job description, as it were, so I did . . . I certainly did some travel. I went to international meetings. I can't remember which ones in particular occurred in that three-year period, but I did that. But anyway, so when I was not traveling, which was probably most of the time . . . in other words, not traveling a lot, I just went to the World Bank to the . . . . I was in the I Building, the corner of I and 19 [I Street and 19th Street, NW Washington, DC]. Carmen [R. Thonedike] came too. There was a little interesting discussion at the very beginning about Carmen. And I was told, "Well, nobody gets to have their own person, you know, **<T: 10 min>** blah, blah, blah, blah, blah." And I just said, "No, Carmen, no Tom." And that was easily fixed, right? So Carmen has worked for me for like thirty-one or [thirty]-two years now. That's really hard to replace, right?

CARUSO: So, after . . . so you've officially finished your position as senior scientist at the Smithsonian in 2001, correct?

LOVEJOY: Yes, it was '98, '99, yeah.

CARUSO: Because I also noticed that it's 2001 when you take on the position as senior advisor to the president at the United Nations Foundation so that's also coinciding with your work for the World Bank, and I was wondering what that position . . . what your responsibilities were in that position and whether or not there was a relationship between the United Nations Foundation and the World Bank directly?

LOVEJOY: No direct relationship between the two. Tim Wirth was the president and first head of Ted [Robert Edward] Turner's billion-dollar foundation [The Turner Foundation]. So basically, Tim gave me that title to make things easier and more flexible for me. I had no particular responsibilities, except when he wanted a discussion about something, I would show up. And so, basically, I left from the UN Foundation directly to the Heinz Center.

CARUSO: Okay. I do want to hear a little bit . . . or I do want to hear about your time at the Heinz Center, but, given that, especially since you were based in DC [in] 2001, I just wanted to hear if you had any experiences that you wanted to share regarding the terrorist attacks on September 11, right? I mean, we knew about New York pretty quickly; there's the plane outside of DC. I was wondering if you have any memories of that time specifically.

LOVEJOY: Well, like everybody, I have vivid memories, right? So, I was in Western Australia, had just given a lecture. I guess it must have been an evening lecture and [had] been

checked into my hotel, which was somewhere . . . it wasn't Perth, [Australia]; it was a little bit further south. I don't remember the city now, but, in any case, so I'm just in my room when the person who had accompanied me from the lecture to a meeting where I supposed to give a keynote the next morning, right, and had seen me safely into my room, etc., etc., called me and said, "You know, airplanes have flown into the World Trade Center. You better turn on your television." I remember saying, "It sounds like a movie." And so I sat there, and I watched it happening with Tom Brokaw on air. Interestingly, I was able to do some direct telephoning to the US—got through. I don't know why I was able to do it from Western Australia, but I was, so I made sure that family, etc., were all safe. And the next morning, I just . . . I was totally exhausted and overwrought, as you may imagine. So I said, "You know, I can't do this keynote. I just can't do it." And we rescheduled it for later in the day, so I did eventually do it. And then either that night **<T: 15 min>** or the next night, I was due to fly back to Sidney, [Australia], which I did, but it turned out to be the last flight of Ansett [Australia], their airline, which was, you know, folding up in bankruptcy, so I took the last flight on Ansett to Sydney. And the original plan was the next day I would fly back to the US. Well, obviously, not, right? So I sat in Sydney for close to a week, and I had plenty of friends, etc., in Sydney, so I just stayed in my usual hotel and tried to, sort of, think things through, as everybody was. And then eventually, I flew all the way home.

CARUSO: What was it like when you returned home and I guess headed back to work at . . . in DC itself?

LOVEJOY: Well, it was . . . everybody was still stunned, and there still was relatively little air traffic. So, I remember, yeah, and I remember, you know, people talking about all of that. I remember, you know, Carmen getting through it all, and I remember Jim Wolfensohn making some really thoughtful remarks about what had changed in the world with that event with basically the US no longer being so safe and isolated as we had thought and that how we needed to rethink all of that, which, I think, was a very on-the-mark thing to be talking about.

CARUSO: And was there any . . . I'm trying to think of how to phrase the question. You had your own experiences for graduate studies going out and doing research in the field, you have general responsibility for Latin America and the Caribbean. There is . . . I'm assuming that there are always some American scientists doing work down there. You'd mentioned that you relied on the local things to gain . . . to get the supplies that you needed and all those materials. During that early period of time after the attack, are you aware of any impact that had on science being done in places outside of the US? Were people who were supposed to travel unable to travel or unable to get supplies? Or, you know, again current concerns with terrorism, money transfers—was it difficult to get access to funds in the US? Did you hear any stories from colleagues about difficulties for scientific practices abroad in that post period, the immediate post period?

LOVEJOY: Well, that's a really good question. Certainly, I didn't actually encounter any myself. But it's, you know, it's hard to imagine how wandering off in the middle of the Amazon forest is considered a threat to anybody, so one of the really interesting things was, sort of, the universal—close to universal—sympathy and empathy for Americans after that. And I remember there was even a tribal chief in Kenya who basically gave some **<T: 20 min>** cattle to the United States because he thought they needed help. I mean, lots of little things like that, which are quite lovely, but in terms of conduct of science, there undoubtedly were impacts, but I didn't encounter them.

CARUSO: Well, thank you for sharing your remembrances of that period of time. Yeah, as you'd mentioned and as I had mentioned as well, I know 2002 is when you became the president of the John Heinz Center for Science, Economics and the Environment. How did that position come about, and can you tell us a little bit about your responsibilities as president of that center?

LOVEJOY: In that very first congressional trip to Brazil, which I assume I mentioned earlier, [in] 1989, it was Tim Wirth, John Heinz, Teresa Heinz, and Al Gore, and Ben Bradlee from the *Washington Post*. And I don't know exactly when it got started, but at some point, John and Teresa, sort of, had this idea that it would be great to have some kind of . . . let's call it a center where different perspectives on environmental problems, such as, you know, business, NGOs, and government could actually all get together out of the spotlight and try to figure out solutions. So that was the idea behind the center from the very beginning, and it had, in fact, not come into existence when John was killed in the airplane accident, which must have been [in 1991] . . . well, I'm losing track now—it was under George H. W. Bush. But the idea had obvious merit and the Heinz Foundation really wanted to do something, and so they established it. They named it the Heinz Center, which in retrospect, I think, while totally understandable, was probably problematical because with that name on it, everybody thought it had all the money it needed. And so that was the big flaw in its design from the very beginning and why it didn't last forever. But it had just done an amazing bit of work, probably over three, four, five years on the state of the nation's ecosystems, and that was being rolled out to the public at about the time I became the next president.

The concept of the Heinz Center was demonstrated very solidly in that report. You know, it included indicators, which you could review state by state. All those indicators were chosen by scientists and others from those three sectors in the initial concept of the center. And it still is a landmark report, and tragically, it never actually became a **<T: 25 min>** permanent part of what government does because it would be a really useful thing, basically, you know, to have a periodic report on the state of the nation's ecosystems in which industry and government, as well as scientists, were involved with common agreement on the outcomes. So, in any case, that's how I came to the Heinz Center. And I remained as president until . . . I'm going to forget the year. It would be something like 2008 or 2009.[13] And then I just became, sort of, the senior

[13] Lovejoy remained president until 2008.

scientist on the staff, and I watched the center over time struggle with that flaw in its design—really just having trouble getting the financial support to do the kind of work it was demonstrably good at doing. And, you know, Teresa rescued it at least a couple times, but she ultimately concluded that you couldn't fix it. And so, in 2010 or thereabouts, she decided to pull plug on it. I had already had negotiations going on with George Mason University. They had actually come to see me . . . a big delegation to come to see me when I was president hoping to lure me but not telling me that's why they came. And they concluded I had much too good a deal to even listen to an invitation. So it was a surprise—a welcome surprise—to them when I sent an email asking about what I call those fancy professorships—do you still have them? It's like much of the work had already been done because they already decided they wanted me before, and so it was a reasonably smooth, if not rapid, process. And so, I started in 2010, I think if I get it right, it was my first year at half-time, half at the center and half at George Mason and then full-time after that.

CARUSO: And so what was . . . so I mean when I think of university professorships, I think of research, and I think of teaching classes. What were your main responsibilities as university professor in the department of environmental science and policy?

LOVEJOY: So my responsibility was one course a year in the springtime for graduate students and for no more than sixteen graduate students and mostly just to continue to do the kinds of stuff that I normally would do like keeping things going in the Amazon and stuff like that. And within a couple years . . . yeah, a couple years, the president—President [Alan G.] Merton—who hired me stepped down, and the new president—incoming president—was Ángel Cabrera, who came from a school in Arizona [Thunderbird School of Global Management at Arizona State University]. **<T: 30 min>** He was a graduate of Georgia Tech [Georgia Institute of Technology] . . . that's right, yeah. And there was also the year of the Earth Summit, so when I sent, you know, a congratulatory email or something like that . . . I got that wrong. So something happened, and I sent out an email letting the higher ups know and somehow included the incoming president. The first email I got back was from Ángel, who totally understands sustainability, is just an amazing guy. Oh, I know . . . he . . . I let the powers that be know that I was going to get the Blue Planet prize and that there would be a press conference about it at Rio+20 event in Rio. And in his response, he said, "Well, I'm going to be at Rio+20. Why don't I stay an extra day and come to your press conference?" So that's where I met him, and there was a lot of media at the time because it was Brazil, I got some really great media. And we hit it off, you know, like the proverbial duck in water. I mean, we are still very close friends, and a couple years later, I had [him] and his wife, Beth, and their two children, to Camp 41, which he, as he left Mason, said was one of his most memorable experiences.[14] So ongoing discussions within Mason about how to advance sustainability and finally, towards the end of Ángel's time, he was able to get money from the state to start an institute for a sustainable Earth, and I am the scientific advisor for that. There are two other institutes, but this is the one around sustainability.

[14] See Amazon Biodiversity Center, "Camp 41." Accessed at https://www.amazonbiodiversitycenter.org/camp-41 on 7 June 2022.

And it's going strong. We have Ángel's successor in office [Gregory Washington], [who] is an environmental scientist, came from Ohio State [University], and he really cares about the sustainable development goals and sustainability. So I think you're going to see some really interesting things to happen at Mason over the next years.

CARUSO: So, you'd been out of traditional academic science for about forty-five years if my number crunching is correct. How was it . . . but, I mean it's a weird question because I know that you were still in contact with scientists who were doing work in the field, and you had your own projects, so it feels like a weird question to ask, but I'm curious to know how it was attracting . . . you'd mentioned you could have up to sixteen graduate students.

LOVEJOY: In the seminar.

CARUSO: In a seminar.

LOVEJOY: I have PhD and master's students.

CARUSO: And so I'm wondering, you know, how was it attracting students. I mean, in some ways you're the new faculty member, but you're not new, right? How was it attracting students to the work that you were doing and getting them involved and interested and engaged with you as a both new faculty member but clearly someone who's been in the field working on environmental science for so long?

LOVEJOY: So, I have this very particular attitude about graduate students basically which I've taken directly from Evelyn Hutchinson, who was my advisor at Yale, who once said he was not **<T: 35 min>** interested in making smudged carbon copies of himself. And I tell that to my students, so they study, you know, whatever is of interest to them, and nobody has to work in the Amazon, right? There are a couple who do, and there is a faculty member of the biology department, David Luther, who now is deeply engaged in the forest fragment project itself, leading all the bird work and doing a crackerjack job, so they're beginning to be some Mason graduate students actually getting degrees related to the fragments projects, although they haven't been able to go there for the last couple years, which has got to be remarkably frustrating for them, but, you know, that's life. But they do things that are really interesting, nonetheless. So, you know, there's just a whole variety of things that people look at, and one student who's one of my first students who, sort of, had figured me out somehow [Advait M. Jukar]. He had graduated from Reed College, decided he wanted to do his graduate work with me, is from India, actually remarkably astute evolutionary biologist I would say and paleontologist. He did his PhD on coral reefs in the Caribbean and works with a really tough dataset that nobody else had dared to take on before and demonstrated that if you don't have

fish—basically, I'm oversimplifying—but if you don't have fish, you don't have healthy coral reefs because they keep the algae back, which otherwise, sort of, snuffs out the reefs. So that was his masters and then for his PhD he looked at fossils in North America and in India and the glacial-interglacial swings to try and get some sense of what that could tell us about what species might do in response to climate change. And he's now on a two-year Donnelly fellowship at Yale, which is a big deal, so I'm really excited for him. So, at the moment, I have maybe . . . let's call it eight or nine out of preference. I try to get PhD students, but you have to take what you can get, so it's a mix.

CARUSO: Okay. Those are the main questions that that I had. Kenny, I don't know if you have those of your own.

EVANS: No.

CARUSO: I know that . . . I mean, we haven't spent time talking about the various other advisory positions you've held, or I think I counted like thirty-two or more different awards you received, and I'm happy to do so, but, you know, I didn't necessarily just want it to be a list of so what was this award, what was that award, so I don't know if you have any other . . . I'm going to ask two questions. The first one is: are there any awards that you received or positions held that we haven't discussed that you would like to mention as standing out in in some way and for what reason? And then if there are, and you answer that one, then I'll ask my last question to you.

LOVEJOY: So I think one of the most interesting was back in the Reagan administration. I served on a blue-ribbon panel on Brazilian and US scientific relations co-chaired for the US by **<T: 40 min>** Allan Bromley. That was a really interesting exercise. I think we ought to do more things like that.

CARUSO: What do you mean it was an interesting exercise?

LOVEJOY: Well, because you get to go to the country in question and engage with scientists there, find out what they're doing, find out what they'd like to do, they find out . . . they can make suggestions in terms of going on in the US. It's a real shot in the arm to the scientific enterprise in a country when we do something like that, and, I guess, that in a way is why the science envoy positions were created under [Barack] Obama, and I did one of those, as you know, which was interesting to do. And I mean, it's really interesting how much our embassies value having a science envoy come. It's given really big priority. I did two trips. One was basically to Malaysia and Sarawak. It was supposed to include the Philippines, but that dropped out at the end. And all my subsequent ones by my personal choice were in Peru because I think

you have much more impact if you can have a sustained impact. So I particularly worked with the US Embassy in Lima, [Peru], on illegal gold mining in the Brazilian Amazon. And we make a difference for a while, but then the governance all fell apart and so sustained effort has not been really achieved. And I did get a phone call, you know, within the last several months: would I be willing to do a science envoy again? I said yes. I haven't heard anything more, so I think it's probably died a quiet death.

CARUSO: Or maybe just because of the resurgence of COVID, people have been a little refocused. Anything else that you want to speak about in terms of awards and honors.

LOVEJOY: Actually, no. I don't think I should be going on about those. I think it just happens if you do a good job.

CARUSO: So my last question in every interview I do is, kind of, turning things over to you. We spoke about your career. We spoke about your time with PCAST. Are there any questions that we didn't ask you that you would like to raise yourself that we can chat about? A lot of people say no; some people say yes. I just like to turn it over to you to make sure that we cover everything that you're interested in covering.

LOVEJOY: Well, I don't . . . I really don't have much to raise under that label, but I have—being in Washington—have watched how the science advice has varied from administration to administration. I think it was really quite good in the [G. H. W. Bush] PCAST era. I think it was excellent in the Obama era. In both cases, it's because the presidents were interested in science. Obama considerably more than President [G.] H. W. Bush, but, as I mentioned in our earlier conversation, [Bush] really believed that science should be part of every decision, and I think that should be the hallmark, you know, of how science is viewed in every administration—not seen as something which comes up with inconvenient things to say—right?—and **<T: 45 min>** to be hedged around but as looking at the actual cutting edge. So I don't know much about what's going on right now, but they clearly understand that investment in science is central for the future of the United States of America, and I'm very grateful for that.

CARUSO: Okay. Well, I think that's it, Kenny, unless you have something else that's come up in the past couple minutes.

EVANS: No, thank you, Dr. Lovejoy.

LOVEJOY: Well, that's great.

CARUSO: Thank you very much for your time. As I mentioned before we started the first session, we'll get all of this transcribed and out to you, and if, at that time you think to yourself, "You know, I really wish I had spoken a bit more about this or I had mentioned that," we can always add that in.

LOVEJOY: Great, and likewise on your side.

CARUSO: Okay. Great, thank you very much.

LOVEJOY: Thank you.

CARUSO: Have a good afternoon.

LOVEJOY: You too.

EVANS: All right. [. . .]

[END OF AUDIO, FILE 2.1]

[END OF INTERVIEW]