Freeman: We'll start with this; I'm studying the Forest Service adoption of Ecosystem Management announced by Dale Robertson in 1992. If you were Rick Freeman interviewing John Gordon, what question would you ask?

Gordon: Hmm, that is tricky.

Freeman: What's important?

Gordon: I guess what I would ask is, was that really the beginning?

Freeman: What to you mean by that?

Gordon: Well, to answer my own question, I think the development of Ecosystem Management was well underway before that decree was made, both inside and outside the Forest Service. As I tried to explain yesterday, I think Ecosystem Management, regardless of what you call it, was a broader more inclusive kind of management that makes our conclusions... and is a response to scarcity. And it's also a way to both correct and keep alive the multiple use idea. Multiple use in its outcome had the implication of promising everybody what they wanted. Ecosystem Management is faced with the task of telling everybody, "nobody is going to get what they wanted." And so, I think it evolved from conditions, both societal and natural, and wasn't the result of any one person's or set of peoples' decrees. And like most things that evolve that way, there are going to be a lot of forms of it and it's gonna change at different rates in different places, and there's going to be a lot of argument about who are the true ecosystem managers —
and largely it might be irrelevant. But that is I guess what I'd say, both in terms of question and answer.

Freeman: Interesting. As a follow up, scarcity evokes the micro-economic analysis if you will. It's a word that's been used in classical economics since the beginning, but it's usually focused on a particular commodity. Would you advance or evolve or mutate the term "scarcity"? What does that really mean?

Gordon: Well, it's a good point, and I don't intend to use it in the narrow micro-economic sense. Two sort of anecdotal illustrations: one, I just was talking with Clark Binkley, who is from the faculty of forestry at the University of British Columbia, and he makes the point that British Columbia has 65 million hectares of forest and has got more land than... that's bigger than Oregon, Washington, California, Idaho, and Montana put together, and they fight over land and its allocation. So his conclusion is that it must be scarce, that people don't fight over things that aren't scarce. The problem with the micro-economic definition is that it has to do mostly with degree of scarcity. I think that's the mistake that Paul Ehrlich made when he made his bet with Simon. Price is an indicator of relative scarcity, but it's not any kind of indicator of absolute scarcity. And what we're facing is demonstrably an absolute scarcity, and all you need to know are two numbers - that is the land base of whatever area you're talking about, let's say the United States, and the human population. And as long as one is increasing and the other isn't, you are by definition faced with an absolute scarcity. There won't be any more land.

Freeman: Okay. I'll jump to the kind of second area. Why and I say this tongue and cheek - why was a tree physiologist chosen as a member of the team concerned with an endangered species in the context of the Gang of Four?

Gordon: There are two reasons; one is rational. In addition to doing tree physiology and physiological ecology research for many, many years - a fair amount in the Northwest — I had been involved in prior efforts to contribute to the solution of the old growth problem. By the time the Gang of Four came along, whenever that was - in '91 — I had been involved since '77, both as department head at Oregon State — the people in our department and around it did most of the
primary research on old growth in the Pacific Northwest — Franklin and his associates. And I participated in that and I also participated in efforts to get people to understand what the problem was and resolve it. I chaired a group for the Society of American Foresters on old growth in the early '80s. And at that time, Jim Lyons was the policy person for SAF. Actually, I still think that is still a pretty good report. Jack Ward Thomas worked on it, and Jerry Franklin with a bunch of people. And had we done roughly what we recommended, I think we would've been better off, but we didn't. That was the second thing. Jim Lyons, by the time the Gang Four came along, was in Congress with the House Agriculture Committee trying to get some resolution to this.

Freeman: As a staffer?

Gordon: As a staffer. I had testified before Congress a number of times on old growth issues and so I was one of people who was included. Also, the fact that Thomas, Franklin and I had worked together a lot before intruding on this prior old growth report, I think was part of thing. It wasn't my tree physiology expertise, per say, that got me on.

Freeman: Would it be to broad to say that it was a political consideration?

Gordon: Well I think it was both. I think it was partially a political consideration in a sense that it was a political process. I mean it was triggered by Congress, so it is politics. And I think the politics part is, as the Dean of the old school of forestry and environmental studies, you have some credibility, and I think that figured. But I think it was also expertise in a sense; I had been immersed in that problem for a long time, and knowing something about Pacific Northwest and having done research there for 20 years.

Freeman: Okay, and that's a really fine lead in to my fourth question — I'll skip the third one for a moment. Why was, in your mind, and I've read quite a few accounts on this, but why do you think the Gang of Four was convened?

Gordon: Well, I can only know what they told us, and what they wanted to find was a middle way. They wanted to find a way that would be palatable to Congress to dispose of this very
embarrassing controversy. We started, well, I started by testifying that you need an owl number, cut number, and then some rationale to connect them. If you want a political solution, you've got to be able to explain to the people why you did what you did. And that led to the matrix I did... will give you cut levels and consequences, and how you might connect the two. So I think that was the real motivation, and they chose not to act at that time on what we presented them. And of course that led to the President's plan of having it moved out of Congress entirely under the administration, which I think was too bad. It would've been much better if Congress stayed involved, but they didn't. But the comment that I remember most clearly was from Norm Dicks, the Congressman from Washington who, when we presented our results, looked at this as just a Northwest Legislature group of senators and representatives, and said "I told you [that] you should have liked ISC."

Freeman: It was similar, right?

Gordon: It was similar in some ways. The ISC only looked at owls; we looked at everything.

Freeman: The salmon, especially?

Gordon: Yeah, especially the salmon. It's interesting. I think we would have done that anyway, but when we were being formally charged by Harold Volkmer, who was the chairman of the sub-committee on Fisheries and Forestry in the House ~ just as we were leaving - he said, "now, we don't want to be blind-sided by no damn fish either." It went right in to all of us, I think.

Freeman: Would you say that the outcome of the report was, in a sense, an enunciation of the terms of debate that would follow? Would you say that that report was able to frame or contain the terminology that set up the boxing ring, so to speak?

Gordon: To some degree, although the ring was in large measure already there. I think what it did do was, one, it made Congress admit they weren't going to do anything — which I think was good for them, and good for the people to follow such things. It set the framework for the FEMAT [Federal Ecosystem Management Assessment Team] process, which was basically an
elaboration of what we did there, and Jack Ward Thomas led that, so it was a direct connection. Beyond that, I think it was the first practical effort I know of to take in to account the whole array of species in relation to different forest management regimes, and to get some handle—I don't claim any great science here—but some on the risks involved.

Freeman: In terms of viability?

Gordon: Yeah, in terms of viability. And I think it showed some important things for the first time in a kind of a practical framework, and one was, if you wait til you're close to the edge, your options are very constrained and tend to be direct trade-offs. You've got to give up this to get that; you sort of use up all the win/win space, which is how we went about the old controversy. In my idiosyncratic view, we were all having such a good time fighting that we forgot about the resource, and it kind of fizzled away while we were having a good time. And by the time we got serious, draconian solutions were the only kind available.

Freeman: I wonder if - this is an impromptu question - but was there some design in that? Can you image the Forest Service really accelerating clearcutting, or not even necessarily clearcutting, but roading—just the general activities that eat away at the base. Knowing that this would be drug out...

Gordon: I don't have any evidence that it was any different than earlier.

Freeman: I am not trying to lead you.

Gordon: No, no. I just don't, I don't know.

Freeman: Some folks say yeah, some folks say no.

Gordon: I've never seen any convincing evidence that there was either a deliberate dragging out on the part of the Forest Service, because that was the other thing. They had basically lost control of it by the time the Gang of Four got on the scene, and never— have never yet got back in
control in my view. And the other one is, I don't know that there was any accelerated roading in the process. The long-blessed process was to road ahead of where you were going to harvest. And I think they kept doing that, but I don't think they did it much differently from what I know.

Freeman: What do you think the relationship is between the Gang of Four report and Ecosystem Management ala the Forest Service?

Gordon: Yeah, well, there is one. I think — it's hard to say where ideas begin, but one of the things we talked about in the Gang of Four and also got talked about but kinda got lost a little bit in FEMAT... well, two things. One was, land allocation is necessary to solve these problems, particularly when they're as constrained as they were by the time we got to them, but it's not sufficient. We're going to have to learn to do two or three things at once. I think one of the things I said was that nature does things by twos and threes; we're going to have to learn to do things by twos and threes. In other words, we can't have a separate area for every function of every species, every whoever — timber shed. There isn't that much land, so allocation will help, but it won't be the final solution or all of the solution. I think the other thing is the need to try things that often seem outlandish, but to get them tried on a scale that won't kill everybody if it's unsuccessful, but large enough so we can tell whether it really works or not. At that time, there wasn't much at all happening in any sense in the woods, whether it was cut timber or restore streams. There just wasn't much input, and we saw danger in continuing that, that we might never learn to do this stuff right unless we could try things. And that came out, and I think that idea was around before the Gang of Four, but we picked on it too. That came through very strongly in FEMAT with the Adaptive Management areas, which then were promptly tied up in rules and stuff. So really not much has happened on those as far as I can tell. I just read the '97 report from them; it was pretty modest, but I think those are definite relationships to Ecosystem Management and Forest Service.

Freeman: Do you think the Hollins' paper is still central on Adaptive Management?

Gordon: I think in terms of Adaptive Management, I think Gunderson and Hollings' book, Bridges and Barriers. Walters and Hollings, and it goes way back you know to VanDyne's book,
The Ecosystem Concept In Natural Resource Management, in '66. That to me is kind of the foundation book of Ecosystem Management. It's an edited book, and it's like most books, forgive me for saying, in a pre-paradigmatic science where things are just coming together. It's a very diverse set of chapters. But if you can read in there both the beginnings of the transfer of ecosystem science, which was very new in 1966, in the management of natural resources. You can see that some of the authors get it and some of them don't. I'd recommend that to you as a historical thing.

Freeman: What's the title?

Gordon: I think it's The Ecosystem Concept in Natural Resource Management, by VanDyne.

Freeman: Did you sense that the convening of the Gang of Four was at least, if not directly a part of, then symptomatic of a power shift within the Forest Service even though it was convened by the Congress.

Gordon: Well, I think it was symptomatic of the Forest Service losing control. I don't know how else to say it. I don't think it was entirely negative. I think the fact that Congress did that is much to Congress' credit. The idea of going directly to the scientific community without a middle organization for information is, I think, a very good thing. I think Congress could do a lot more, and they'd get a lot more understanding between legislators and scientists and so on. In a sense, the Forest Service didn't have too much to do with it. The fact that the Forest Service was not very happy about what we were doing must have been that they felt they lost something that way control, I suppose. We were called in by Dale Robertson, and sort of bawled out for running off and getting Forest Service scientists involved. You know, if you're just an ordinary citizen, you just don't tell Congress to stick it in their ear; you respond. I wish it would have set more of a precedent than it did. Actually, Jim Lyons and I wrote a little paper on that, that's in Jerry Franklin's Twenty-first Century Forestry book. But, Congress has had trouble over the years getting scientific advice in a timely way. They use several mechanisms like the National Academy [of Science], but I thought that the Gang of Four was a pretty good thing to do even though we didn't act on the result. It would be good if they did that.
Freeman: When the dust settled, and the election was over, and Bill Clinton had won... the following year after Bill Clinton had won... Jack Ward Thomas — who was on the Gang of Four, on the ISC, on the SAF committee — became Chief. And that signaled to a lot of people that some kind of power struggle. Even if it was not Jack Ward Thomas and Dale Robertson, but just a result of some power struggle somewhere, this group — this person who was part of the Gang of Four was bawled out by Dale Robertson, suddenly was in Robertson's chair. What significance is that?

Gordon: Oh, I think two. One is, if I remember correctly, Clinton had made a campaign promise that he would do something about the forest problem in the Pacific Northwest, and he also, I think, promised that he would "green" the federal agencies. It's never been my perception that Clinton cares much about environmental issues, because I think he considers them pretty small in terms of national politics. Gore, of course, is reputed to be much more interested. But I think he did say that, and I think that this is supposition on my part. The word went out that we're going to move the Forest Service toward the environmental end of the spectrum, and what better way to do that than with the Chief? I mean in terms of public consumption.

Freeman: Do you think Dale Robertson and Leonard felt that change coming or was it just too crazy?

Gordon: Well no, I think they felt it coming, and my take on it has always been kind of where we started out, that it has changed with the times. It's not a matter of individuals very much, or even of politics of the usual party kind very much. It's the scarcity, it's the change to an urban population, it's the change in how people think they interact with agencies and government. So I think it was coming, and I think Robertson and Overbay - maybe particularly Leonard — saw it coming. I think their view tended to be — and it's one I have some sympathy with—is that you can still cut a lot of timber and serve environmental values, but they really didn't have long enough to change. I was in talking with Jack Thomas this morning, and he was saying that it's the proverbial turning the oil tanker to get an organization with that much tradition and that much bureaucracy and that much supreme authority... they don't turn on a dime, it takes a while. And I
really think, despite Dale's grouchiness about the Gang of Four, he wasn't totally out of sympathy with that sort of thing, and was trying to turn the tanker, along with Ecosystem Management. He just didn't have very long to do it.

Freeman: Okay, a couple other questions. What do you see as the relationship between Ecosystem Management - ala the Forest Service again - and the Endangered Species Act? Is the Endangered Species Act hinder or help, is it a mixed bag?

Gordon: Well, the Endangered Species Act is both, I think, a response to the scarcity thing, and it's the major driver of what's going on in natural resource management, even where it's indirect. And I think as such, it's inevitable and irreplaceable. It was going to happen in some form, and in some form it's got to be there. I think we've proven that. I think there's a lot wrong, and by wrong, I don't mean culpable wrongness, but we've learned. We never had an Endangered Species Act before; we never knew how to enforce it; we never knew what it's consequences would be. And when you think about it, it is enormously arrogant — you know, we're going to take over; we're going to say what stays and what goes. And it's a pretty gutsy proclamation, but if you believe the people who talk about the end of nature, and the fact that we affect it all now so we're responsible for all of it, and in some sense, we're managing all of it, it's the right direction. I think it's done far more good than harm. I think we need major overhaul of the way it's enforced, the next generation of regulation that I talked about. I think we need some tinkering with the law, although I think still it's most... I'm not a legal anything, legislative anything — but the way I read it, it is an ecosystem-based law. It says that in there, but then we went on and interpreted it as a species-by-species law, and maybe we could just say, "gosh, we learned that that's the wrong way to interpret it, and now we're going to interpret it on a big ecosystem basis and it will work fine. The other thing we've got to fix is this managing across boundaries. The idea is just scaring the spit out of small landowners is inimical to nature, timber production, wildlife maintenance is just a terrible bad thing. And you can go on and say, well we haven't really put many of them in jail and so on, but stop right there. If we get all those people thinking that maintaining endangered species is bad, we're in a world of hurt, because there are ten million of them. So, we've got to make it user friendly, and we've got to give incentives, we've got to be much more forthcoming in terms of — I mean, I've dealt with enforcement people on ESA stuff.
that scare me. I mean, you know, they're obviously ready to use the federal hammer on the local level. I just think that's a stupid way to do it.

Freeman: You think then that, in a sense, that ESA — and I'm not trying to actually get a personal opinion regarding the ESA, but more I'm trying to establish this relationship. In some ways it seems like ESA hinders the Ecosystem Management, and in some ways it seems like it gives it sorts of legitimacy.

Gordon: What I was trying to say is that I think it's one of proxible drivers of Ecosystem Management, one of the expressions of scarcity that paused Ecosystem Management. On the other hand, I think it's the enforcement that hinders Ecosystem Management, and I'll give you an example: streamside protection zones. Fishery scientists who thought those up and put them in FEMATtell me that they did not intend those to be no-touch zones, and in fact, they think that touch could enhance fisheries if you did it right. And there are possibilities in some places for both timber management and fisheries management in riparian zones to be compatible if you do it right, but the way it's interpreted, you can't do anything, and I think that's too bad.

Freeman: Just out of curiosity, did you ever read Franz Kafka, The Castle?

Gordon: Yes.

Freeman: Does that kind of get to this a little bit?

Gordon: Yeah, yeah.

Freeman: Doing this study, I've had that question in my own mind a lot. Well, one last question. Does it seem to you that the congressional role over the last thirty years, particularly in the Appropriations Committee—does it seem to you that that poses a problem to Ecosystem Management? And if so, or if not. How does that relationship work?
Gordon: Well, like with everything else, I think you talk to — I'm not one of course and I don't know much about it — but you talk to political scientists, and they say it's not a good way to make law in appropriations bills — do the thing, authorize and then appropriate. And when you make important law — precedent setting law — through the appropriations process, you're in some way shortcutting the representative democracy process. So, in that sense, I think it's bad in general, but it's part of our political system and culture, and that's how Congress does it, so that happens. The old "Catch 22" of authorizing lots of things, so you have this grand plan like [National Forest Management Act (NFMA)] and dictates, and then you only fund pieces of it, is to me — and remember I am a professional forester — but to me that is politics at its absolute worst, because it gives the appearance to the voters that something is being done, but is in fact being prevented. And I really hate that. I honestly don't see why they do it. I guess I see why they do it, because they think it gets votes and stuff. If anybody ever gets around to explaining to people that they pass these grand bills, and say we're doing this and we're doing that, and we're doing the other thing. And then, in the next breath, they prevent those very same things from happening by not appropriating any money for them, I think there's going to be a lot of anger, and I think it's appropriate anger. I remember when it was routine to demand—well, the law demands, the NFMA demands, prompt reforestation. And then the reforestation budget would be ten percent funded. Now what the hell are they saying?

Freeman: How can an agency plan?

Gordon: They can't, and the Forest Service has been — I don't say it is their total fault — but I don't see how they've done as well as they've done — in this sense. First of all, there's no overall target for them to shoot at. The country, the Congress has not said this is how we want it, you know. You see if we have all these piecemeal we don't want the species to go away. We want you to plan, you know. We've got the Sustained Yield Act. We've got all these little bits and pieces, some of them contradictory. But there is no big target. And what will do all the books about organizational behavior and management say? Unless your people all know what the big target is you're not going to reach your potential as an organization. So, in the one case they don't have a target; in another case, they are subject to this political whipsawing. And I really don't see how they do as well as they do.
Freeman: In a sense, could you say that adoptive management is also going to have to not just be ready to adopt in terms of its experimental findings. (I lean a lot on Kai Lee — a nice enunciation of that idea.) But, will we have to be able to adopt to the changing congressional environment?

Gordon: Absolutely, and that's one of the future things. It will take a lot of flexibility to meet... and kind of the balance wheel to me is, this of course is my soap box, is a forced congress-like process that is ongoing. That involves ever more people in a nongovernmental way in thinking about forest and construing about their futures. And with that in place, which is a big if, then I think that's a major help in meeting future political uncertainty.

Freeman: Any last minute comments, and we'll close it up.

Gordon: Well, really, I think it's marvelous you're doing what you're doing.