Gathering of the Elders, Holden Arboretum, April 15-17, 1988.

Interview with Dr. Verne Rockcastle. Interviewer: Jesse Dobbs.

Interviewer: This is Dr. Verne Rockcastle, from Cornell University. Could you give us some background on you're roots?

Verne Rockcastle:

When I was just a lad, my mother was quite interested in birds and in flowers. I can remember, just as Roger Peterson mentioned last night, I used Chester Reed's <u>Bird Guide</u> and <u>Wildflower Guide</u>. I can remember these pocket guides that I practically tore the pages out of those as a kid. So Chester Reed was probably my first big book influence, and both flowers and birds.

My parents, both of them, were quite willing to let me wander off alone. I can remember packing my lunch in the morning, taking my bicycle, and going for the whole day. They never asked me where I was going, how long I would be gone; they knew I would be back for supper. I might be riding along the old barge canal outside Rochester, or out in some fields or woods. I spent a lot of time alone, a lot of time just plain hobnobbing with nature. Not having much knowledge about it, but at least being able to observe; just fascinated by everything that went on around me. That was early.

In my high school days, I became enamored of mathematics, and the physical sciences, because of superb teachers I had in mathematics and in chemistry, and in physics. These were people who applied the things that I was doing in school. For example, taking me and other students (in the mathematics class) every month to the Rochester Engineering Society meetings, where we actually sat and listened to engineers talking about their problems. For high school kids this was exciting-this was where the action was at.

In college, probably the one person that had the greatest effect on me was Bill Harlow, a professor of dendrology at the New York State College of Forestry. He was a nature man to his toes. He was a contemporary of Cap'n Bill Vinal, L.B. Sharp, E.L. Palmer--whom he didn't know very well. He was a naturalist's dendrologist. Our field trips were real treasures, and my hours in the field with Bill Harlow were special ones. Later, after I'd gone through a master's degree at MIT [Massachusetts Institute of Technology], where the physical sciences again were concentrated on, and with my forestry work as an undergraduate, I did [post]-graduate work at Cornell.

Although I followed immediately after E.L. Palmer's retirement, I got to know him guite well. I took a number of field trips with him--I was never his student, but I was a friend and associate. I learned a lot from him, and especially from my chairman Eva Gordon. I must also say from Bill Hamilton a famous mammalogist, and Lamont Cole, an ecologist of note; these two, again, were outstanding field biologists. So from all of them, with a major in nature study, and a minor in mammalogy, and another minor in animal ecology, plus my doctoral research in microclimates, and their effect on animals, I pulled together physical science and biological science, and mathematics. guess that seems to be unique. I was interested in: how much, how many, how far, how fast, how do you know for sure? puzzled me that other people weren't as interested in the quantitative aspects; I thought these things all begged for quantifying, and I had fun doing it.

The current approaches to nature study that are most exciting to me today, are those that truly integrate physical science, mathematics, and biological science. After all the whole outdoors is an integrated picture; any division is strictly an artifact of mankind. Nature doesn't compartmentalize, I would rather not compartmentalize. The most exciting ones to me today are the ones that involve children, because they're the hope of the future. Anyone who is, I guess past college age and older, is sort of over the hill, as far as great expectations of changes in behavior are concerned. But the kids hold promise, and I like to work with them; their ideas are fresh, and they are creative thinkers. I think that's where the action is.

A lot of the things that are done in so called environmental centers are archaic and shallow; appealing--yes, fun--yes, but environmentally promising--not that much. Let me see if I can explain why. The general approach of environmental centers or nature programs is to suburban and rural kids. But, just one school district in which I work (we'll take the Bronx) would have 22,000 children in one school district. Over 2,000 children, grades one through five, in a single school. This is a population concentration that you can't handle in most nature centers; they would be swamped with that order of magnitude. But programs that appeal to those kids are precisely the ones we need, because: the birth rate's highest there, the problems are highest there, the concentration of voters is highest there, the concentration of taxpayers is highest there, and the the social problems are greatest there. So programs that appeal to that group, those are a must, and I have to admit to excitement about those.

Interviewer: Are there any particular programs that you see as promising?

Rockcastle:

There are some programs at places like Gateway, which is a National Monument, just east of New York City-they deal with thousands and thousands and thousands in the course of a vear. have to be excited about that kind of program. But again, they deal with a fraction of the children in the inner city. of having outreach programs, I would like inreach programs. would like programs that deal with the children where they live. Don't bus the kids out to Greenkill--out to the camps that are twenty/thirty/forty miles from the city, and in the woods and fields--that's not where the kids live. I think we have to look at the city blocks, the concrete, the bricks, the vacant lots, the broken down buildings, and start right from there. plenty of natural history right there; and remember, natural history isn't all trilliums and song sparrows. It's tree of heaven, it's cracks in the pavement, it's falling bricks, and rusting steel. It's street lights, and shadows, and -- lots of things.

Interviewer: The same natural processes--

## Rockcastle:

The same natural processes are at work there, but they're at work on man-made structures. I think we have to think about that. We have to think more in terms of the reality of the concentrated population areas, and less in terms of rail fences, and extensive fields and forests, and clear streams. The latter is nice, but it harks back to to something that most people never will see or experience. I think we have to keep in mind where the needs are.

How should we improve the profession? Let me give you an example of what happens to people in training. At the Lorado-Taft Field Campus; where do they go for their training? They go to nature centers. They go to environmental centers and interpretive centers. I think they ought to go to inner-city Detroit; they ought to go Chicago's Loop; they ought to go to the Bronx, and Queens, and to inner city Philadelphia. If you ask these people where they would like to spend the rest of their lives teaching, they want to go to the Grand Tetons. How many say they would like to go to the Battery, or to East River. But darn it, that is where the cancer is in our land, and I think you have to deal with that, and you have to turn young peoples eyes toward the inner city, and away from the Grand Tetons and Yosemite. Otherwise, we won't have Yosemites and Tetons.

"Where do I see the fields of nature study, camping, and outdoor education going in the future?"

Let me give you an example. Not far from Cornell [Ithaca,

NY] some years ago, on a pristine trout stream, a summer camp for kids for New York City was built. When those kids came to that place, they were as much out of their element as I would have been out of my element to go down to 9th Avenue and 182nd Street. The kids were—oh, they were happy, because they were away from home. But they could go one block away from home and be happy that they were away from home. They could just be out of their apartment and be happy that they were away from home. I thought, to take these kids up there, and treat them to that, and send them back into the ghetto was almost like giving a starving child a drink of pure water, and sending them back home and saying. that's going to be your last drink of water.

Those kids--lets face it, a few of them are going to experience that, but by and large, most of them are committed to a life in a crowded city area. In fact, lets face it, most of them will live not far from a slum for the rest of their lives; but the slum can be improved. They can learn something about the beauty of clean living quarters, about the beauty of decent architecture, about the beauty of the city scene when it's a proper scene, not when it's an improper one. Instead of flexing their muscles with chains and saws, I'd like to see them flex their muscles getting rid of old bedsprings, rusted car bodies, tires, and junk. I think it can be done, and done right.

The focus of these conservation education centers— What are we conserving? The most important thing to conserve is people. Conserve our mental health, conserve our society. The rot of society is not where we're sending these young people for their training.

Interviewer: So we're not reaching the masses-Rockcastle: Absolutely not. Interviewer: And we're not relating to them.

## Rockcastle:

If I could be granted one wish for the future of this field, I guess it would be for people who are really skilled in education, skilled in concept development, skilled in teaching concepts, principles, who constantly ask the question, "What does it mean to understand something?" If people with that kind of skill could somehow be wedded to the people who see the social needs of the inner city. And those two people form a consortium, to direct all this nice concern for the future of mankind to where most of mankind lives. And start asking some hard questions about improving the conditions there, knowing that we never will have a homogeneous society. Knowing that the society the advantaged few seek to maintain, can be maintained only if we somehow change the social structure, and the outlook, and the goals, and the ideals, and the wants, and so on, of the people who are the most needy, and where the most critical areas of our society are today.

Now I don't mean to say I have no interest in birds, or flowers, or trees, or geology, or astronomy. But, most of the kids in this country cannot see Polaris. Why? Because they live with the city lights and the pollution, preventing one from seeing the night sky. So I have to think about what they are seeing, what they smell, what they feel, where they are, and what changes I can bring about so they can find some kind of a roadway, some kind of a pathway to the things that are within their grasp, within the grasp of the millions, and the tens of millions. And my wish for the future is that somehow we'll manage to turn our attention to those kids, and engage in a program of action; of efficient, meaningful education, with an environmental emphasis, where the environment is the environment where the people are living.

Interviewer: So that's a big gap.

## Rockcastle:

It's an awfully big gap. And if we don't somehow turn our attention there, then one day, there won't be need of our turning our attention because we will have lost it forever. If we lose that battle, we will lose all these peripheral battles, out in the relatively pristine wilderness. It sounds preachy, and I don't mean it to be that.

[End of taping]