TOPIC 2. SOCIOLOGICAL RESEARCH NEEDS

One of the areas of greatest need for research is in the sociological area. Society has changed so much in the last few years, and increased communication capabilities now make it possible for practically the whole world to be in almost continuous contact. The impact of such capabilities on people is tremendous.

Psychological characteristics of people may not change, but the use of psychgology to change opinion, muster support for certain causes, and gain control over significant segments of thought has never in the history of mankind more possible and more frightening. How much do wildlifers know about these possibilities?

Politics is a part of life. "Playing politics" is part of the wildlifers daily routine in many instances. How do we "play politics" without comprimising ecological principles? What kinds of personalities and approaches have the greatest impact on politicians and the electorate? How much credit should be given to the electorate for understanding ecological principles?

These and other considerations are discussed briefly in the next two UNITS on psychology (UNIT 2.1) and politics (UNIT 2.2).

UNIT 2.1: PSYCHOLOGICAL FACTORS

The need for understanding the psychology of humans in the milieu in which the vast majority of our population lives is becoming rapidly more important. While humans do not change appreciably, the environments we create by urbanization, suburbanization, centralization, communication . . . are so vastly different from the hunting, pastoral, rural, agricultural environments that so many of us grew up in about the middle of the 20th century that we may have trouble adjusting to the new mood of the people of the land.

It is easy for those of us over the age of 40 and in possession of a farm or rural background to assume that other persons share in not only our concern for wildlife, but our knowledge of some of their basic characteristics. There may be an apparent concern, and there may be some knowledge, but both are easily overestimated.

As a professor in the College of Agriculture and Life Sciences at Cornell University, I have noted an increase in the lack of field experience of undergraduate students in wildlife science over the last 15 years. Most of them do not hunt, nor do they spend much time in the field on their own.

Are Cornell students unique? I think not. They are products of the environmental movement and suburbia, not unlike their peers at major universities across the country. They are in wildlife because they have had exposure to camping, they like wildlife, and they have been emotionally drawn to it, primarily through television. One-minute or half-minute spot announcements provide an emotional appeal that persuade them to devote their educational opportunities in college to this field, even if it means a "liberal science" education with little hope of finding professional employment.

I have also learned that, while they are inexperienced in the field, they are very capable in other ways, of combining a rather sophisticated high school and college education with some of the practical aspects of field work. They simply need more field opportunities throughout the year.

They are entering the field of wildlife management at a very challenging time, and it may be that they must be counted on to bridge the gap between the old-timers and the new society. In fact, they may do it better than any of us pre-earth day individuals could.

What must they do to bridge the gap? They must understand both the basic ecology of species and the psychology of society. Much is known about the former, little about the latter.

The psychological reactions of various segments of society are of greater importance than small errors of estimation in body weights, ecological metabolism, forage intake, population structures, and population predictions. In fact, our biological knowledge is so far ahead of our knowledge

of the basic characteristics of a restless society that it is imperative that we devote considerable time to the analysis of groups ranging from the devoted hunter to the most skilled anti-hunting proponent.

One of the more enlightening experiences I have had in recent years was that of listening to one of the officers of "Friends of Animals." His presentation clearly indicated a marked lack of knowledge about the biology of white-tailed deer. One of his main points was that we spend too much money on deer and we neglect non-game species. So much money is spent for deer management and habitat improvement when there are greater needs for attention to other species. Furthurmore, he believed that the wildlife manager raises deer only to shoot them, and he was opposed to hunting.

The opposition of this young man to hunting is not atypical of those in his age group. Why is he opposed to hunting? There are undoubtedly several reaons why, but one main reason came out in the discussion after the formal meeting. This young man was a veteran of Viet Nam. He had been on the battlefield with soldiers jumping out of foxholes and spraying bullets in all direction, hoping to hit an appropriate target. He was clearly shaken by the use of guns, and for good reason. He assumed that hunters do the same thing, and that opening day in the field is characterized by hunters shooting in all directions, hoping that they, too, hit something. He spoke about the scenario on opening day in such terms, and while it is not the typical situation in the backwoods of Upper Michigan or Maine on opening day, there have been instances where the number of hunters has been much too high, hunting pressure has been much too great, and hunters much too irresponsible to dispel such notions.

Since the population dynamics effects of prohibiting hunting may be predicted with a high level of certainty, it is important that psychological issues such as anti-hunting sentiment be understood and dealt with in a rational rather than an emotional way. Participation in hunting must be an individual decision when hunting is desirable or necessary for population control. There may be very good reasons why some persons do not wish to hunt. In fact, the psychological progression in attitude towards hunting by professionals follows a fairly definite pattern, characterized by no less than Aldo Leopold and Sigurd Olson, both well-known in the field of ecology and wildlife. Both hunted as youth, but as they became more involved in the ecology of species and the land, their interest in hunting waned and their interest in the hunted increased.

There is much room for innovation in the ways in which hunting and hunters are regulated. As the numbers of hunters has increased, some states have gone from a single high-density opening day to staggered opening days. Quota systems are used to spread hunting pressure out in both time and space. More could be done by many states, along with minimizing of "special hunts" that seem to attract so much attention by the media. Prevention of problems is always so much easier than the correction of problems, and it would be most desirable if biologists and psychologists could get together on developing formats that would be ecologically reasonable and much more psychologically acceptable to significant segments of society.

REFERENCES, UNIT 2.1

PSYCHOLOGICAL FACTORS

SERIALS

CODEN VO-NU BEPA ENPA ANIM KEY WORDS---------- AUTHORS---------- YEAR

odvi

CODEN VO-NU BEPA ENPA ANIM KEY WORDS---------- AUTHORS---------- YEAR

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obmo

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oram

CODEN VO-NU BEPA ENPA ANIM KEY WORDS---------- AUTHORS---------- YEAR

NAWTA 36--- 383 396 wldl human behavior, wldlf mgmt ; potter,dr 1971

UNIT 2.2: POLITICAL FACTORS

Politics have always played a significant role in wildlife management. It is through political action that laws are enacted which have established wildlife managment areas, state and national forests, parks, wilderness areas, and many other kinds of areas set aside that result in direct or indirect benefits to wildlife.

Politics have also been very important in determining the mechanisms, if not the actual dates, for setting seasons. Some of these are arbitrary, and some are based on the recommendations of biologists concerned. What should our views of politics be as professional biologists in democratic societies?

Political action should be viewed as the mechanism used by democratic societies to maintain order. Biologists would like more control over the setting of seasons and other decisions pertaining to wild ruminants and other forms of wildlife. Dentists and doctors would probably like more control over their roles in society too, as would teachers and lawyers. If each group were given the privilege of setting policy and practices pertaining to their areas of interest and expertise, chances are pretty good that, in the absence of checks and balances, the system would go out of balance.

The alternative seems to be for professional groups to form professional societies that become forums for debate, decisions, resolutions, professional literature, and certification. Then, the body as a whole can present its views on particular matters, and politicians will havemore options to weigh on behalf of their constituency.

The format for progress in politics is one of continuing education, in a formal sense as ecology and wildlife biology is part of public school curricula and in an informal sense as the media and personal talks are used to help the public understand the viewpoints of our profession better. The last educational practice employed prior to the enactment of a bill is called lobbying, a very special kind of education for a particular purpose.

What research should be done in relation to managment of wild ruminants? I suggest that the very best managment programs, the very worst management programs, and a good representation of programs between these two extremes be evaluated with respect to the decision-making process, determining where the decisions were made that resulted in good, bad, or indifferent managment. Are the most important decisions being made by biologists, by legislators, by a commissioner, or by whom? Are there decision-making formats that are optimum in different situations? What kinds of questions are vulnerable to marginal answers at different levels of decision-making? What kinds of questions should be answered by biologists, and what kinds by lawmakers?

It is my opinion that the more comprehensive the synthesis and the more clear the picture of ecological alternatives, the greater the chances are that political decisions will be made within a viable ecological framework. I have gained the reputation of being involved in the details of white-tailed deer biology to a high and perhaps excessive degree. I have been criticized for taking such a numerical approach. I have been thought of as a specialist, and they know more and more about less and less. From the very beginning of my research at Cornell University, however, I have felt that the greatest need for the kinds of results I am getting will not be felt by the biologist, but by the lawyers and judges. The time will come, I have told my classes, when I will be called as an expert witness, and I intend to be prepared to discuss every aspect of deer biology that I am called on to discuss. Furthr, I intend to discuss biological functions in numerical terms, demonstrating how one function is linked to another numerically, just as one function is linked to another biologically.

One example will illustrate the usefulness of this approach in relation to the political arena. Harriman State Park, New York has been closed to deer hunting for many years. A season was opened in 1981, only to be closed almost immediately by court order. In the meantime, biologists were able to collect 12 sets of antler beam diameters and dressed weights of yearling males. The mean antler beam diameter ws 11.6 mm, and the mean dressed weight was 67.4 pounds. Equations in Severinghaus and Moen (1982) indicate that the predicted average dressed weight should be 70 pounds, which is only 4% different from the observed. Also, reproductive rates of the females on such range is expected to be 0.0 for fawns, 0.47 for yearlings, and 1.33 for adults, much less than expected on good deer range in New York State.

The weights of these deer were also compared to the weights given in Moen and Severinghaus (1981) for deer on different ranges in New York State. It was shown by the graphs calculated with equations in that paper that the deer were very small due to deteriorating range conditions, and that they were very close to the weight of no return even before the winter began. This kind of evidence rather than subjective opinion resulted in decisive action by the judge. The hunting season was opened again, less than one week after it had been closed. Similar cases are expected in the future, and I am prepared to present as much evidence as humanly possible on the way biological processes function and relate in the natural world. If the public is exposed to such comprehensive thinking, perhaps there will be greater acceptance of certain management practices, and the courts will have fewer cases to decide on an emergency basis.

There is much to learn about the political process in today's society, especially about the various segments of society that bring pressure for their own interests on politicians and both the legislative and judicial processes.

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Moen, A. N. and C. W. Severinghaus. 1981. The annual weight cycle and survival of white-tailed deer in New York. New York Fish and Game Journal 28(2):162-177.

Severinghaus, C. W. and A. N. Moen. 1982. Prediction of dressed weights and reproductive rates of white-tailed deer from yearling antler beam diameters. New York Fish and Game Journal 29:(In press).

REFERENCES, UNIT 2.2

POLITICAL FACTORS

SERIALS

CODEN VO-NU BEPA ENPA ANIM KEY WORDS---------- AUTHORS---------- YEAR

odvi

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