

## EDUCATIONAL OPPORTUNITIES AT THE UNIVERSITY OF NEBRASKA-LINCOLN

SCOTT E. HYGSTROM, Department of Forestry, Fisheries, and Wildlife, University of Nebraska, Lincoln, NE 68583-0819.

*Proc. East. Wildl. Damage Control Conf. 5:153-154. 1992.*

University students, particularly those enrolled in natural resources programs, make up one of the smallest, yet potentially most important and influential audiences for wildlife damage professionals. Considering that these students will be tomorrow's natural resources technicians, biologists, and administrators, I feel that it is critical that we provide them factual information about wildlife damage to increase their awareness of potential problems and solutions, and increase their ability to make well-informed decisions.

An important aspect of education is accurate audience identification and association. This is not an easy task, however, as today's audience is collectively a moving target. Once primarily rural and agriculturally oriented, it is now increasingly urban. Although I teach in mid-America at one of the nation's most prestigious agricultural colleges, 80 to 90% of the students in my wildlife damage courses have urban backgrounds. With this changing environment, individual attitudes have changed, which makes our efforts all the more challenging and essential. We can have an impact on attitudes about wildlife and wildlife damage management (Timm and Schemnitz 1988), but the use of different media and educational strategies will be required to get the message across.

The University of Nebraska-Lincoln offers a Bachelor of Science degree in Natural Resources with a major in Fisheries and Wildlife that is administered by the Department of Forestry, Fisheries, and Wildlife (FFW). Three of the 7 fish and wildlife faculty (myself, R. M. Case, and R. J. Johnson) share an interest in wildlife damage management, and conduct associated teaching, research, and extension activities. The department was recognized as a national leader in wildlife damage management during a 1989 Cooperative State Research Service (CSRS) Review.

### COURSE OFFERINGS

#### **Wildlife Damage Management (FFW 348)**

FFW has offered a 3-credit course, entitled "Wildlife Damage Management" every spring semester since 1985. It is a junior-level course designed to cover the fundamentals of prevention and control of damage caused by vertebrate species, principally mammals and birds. It provides an opportunity for discussion of the philosophical, environmental, and sociological aspects of wildlife damage management. The book *Prevention and Control of Wildlife Damage* by R. M. Timm is used as a text. It was produced by the University of Nebraska-Nebraska Cooperative Extension (NCE) in 1983 and is currently being revised by me, R. M. Timm, and G. L. Larson. Other readings are assigned from NCE NebGuides and Circulars, *The Wildlife Society Bulletin*, and proceedings of the Eastern

Wildlife Damage Control Conferences, Great Plains Wildlife Damage Control Workshops (GPWDCW), and Vertebrate Pest Conferences. During 1989, students participated in the Ninth GPWDCW in Ft. Collins, Colorado and in 1991 they assisted in hosting the Tenth GPWDCW in Lincoln, Nebraska. The course has received high marks in student evaluations and has frequently been referred to as "one of the most useful courses offered on campus." Average enrollment since 1985 has been 20 students.

#### **Internship in Forestry, Fisheries, and Wildlife (FFW 486/896)**

In 1990, C. S. Brown, State Animal Damage Control Director, and I developed a Cooperative Education program between the Nebraska office of the United States Department of Agriculture, Animal and Plant Health Inspection Service, Animal Damage Control (ADC) and FFW. In this program, 1 student per year is employed by ADC for 2, 3-month periods, during which time he/she may earn 3-6 semester-hours of credit. These internships are excellent opportunities for students to gain experience in fieldwork, administration, policy, and public education. Internships were identified as a priority issue by FFW in 1989. Upon satisfactory performance and completion of the degree, the student is provided a noncompetitive hiring status with ADC for 4 months. T. D. Halstead was the first student in FFW to undertake this internship during 1990-91, and he is now serving as an Assistant District Director for ADC in Phoenix, Arizona. A second internship has been established with K. I. King for 1992-93.

#### **Independent Study in Forestry, Fisheries, and Wildlife (FFW 486/896)**

Independent Study offers students an opportunity to earn 1-5 semester hours of credit while exploring a subject in natural resources that interests them, be it field or lab research, literature review, assistance with established projects or other worthwhile experiences. Since 1980, more than 12 students have completed wildlife damage-related projects on subjects such as: (1) impacts of predators on waterfowl; (2) life history studies on beaver (*Castor canadensis*), coyote (*Canis latrans*), red fox (*Vulpes vulpes*), and pocket gopher (*Geomys bursarius*); (3) rodenticide testing; (4) cottontail rabbit (*Sylvilagus floridanus*) and prairie dog (*Cynomys ludovicianus*) exclusion; (5) landowner attitudes; and (6) agency policy.

#### **Graduate Studies**

FFW offers a Master of Science degree in Fisheries and Wildlife. Successful completion requires satisfactory coursework, proficiency in oral and written communication, and computer and statistical applications, and completion of a

scientific project. To date, 15 students in FFW have completed wildlife damage-related projects and published theses on a variety of subjects including impacts of coyotes on livestock, predators on waterfowl, tree squirrels (*Sciurus* spp.) on power transformers, pocket gophers on forages, and small mammals on emerging field crops; activities and life history of pocket gophers; grazing management and barrier fences for prairie dog control; lines for excluding house sparrows (*Passer domesticus*); repellents for small mammals; and many more. Currently 4 graduate students are nearing completion of their projects, including lines for excluding house sparrows, behavioral ecology of pocket gophers, and habitat selection of white-tailed deer (*Odocoileus virginianus*) and subsequent impacts on agricultural crops.

#### Future Additions

I am interested in developing 2 new courses that cover perceived deficiencies in our current wildlife damage management curriculum. First, I wish to include a techniques lab by 1993 that would be offered concurrently with FFW 348, the lecture course. This lab would provide opportunities for "hands-on" instruction of wildlife damage control methods and materials, computer applications, field trips, and other activi-

ties. Second, I would like to develop a graduate-level readings course or seminar by 1993 that would focus on current issues in wildlife damage management. Subjects would include philosophy, public policy, regulations, animal rights/welfare, economic analysis, public education, current events, and others. Open discussions would provide for an exchange of ideas in sufficient depth and rigor to fully challenge our graduate students. I am currently examining the possibility of establishing a Wildlife Damage Management Emphasis in our current Fisheries and Wildlife major. The inclusion of existing and proposed wildlife damage courses along with courses in population dynamics; integrated pest management; pesticides; policy; agronomy, horticulture, and/or animal sciences; and communications would provide sufficient direction in an educational program to justify Emphasis status. We hope this would be an attractive option for students interested in a career in wildlife damage management.

#### LITERATURE CITED

- Timm, R. M., and S. D. Schemnitz. 1988. Attitude change toward vertebrate pest control. Proc. Vertebr. Pest Conf. 13:26-32.