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New Book Presents Methods For Detecting Rare Carnivores

ARCATA, Calif., June 30, 2008—Twenty-five North American scientists present their techniques for detecting rare carnivores in a new book useful for land managers developing wildlife conservation plans.

“Noninvasive Survey Methods For Carnivores” describes current methods for collecting population data, while minimizing disturbances to animals being studied. Scientists with the U.S. Forest Service, Wildlife Conservation Society of Canada and Montana State University’s Western Transportation Institute edited the 379-page guide.

“We summarized what’s become a paradigm shift in research methods,” said William Zielinski, a Forest Service scientist at the Pacific Southwest Research Station and one of the book’s four editors. “It’s no longer necessary to capture, handle and stress individual animals to achieve many research goals. Questions can often be answered without putting animals and human handlers at risk.”

Live capture and radio-telemetry methods remain valid for many research questions, Zielinski said. But, a compendium of current noninvasive techniques was unavailable until now.

The book is available through the nonprofit Island Press. It is intended primarily for wildlife biologists, conservationists and students working with elusive carnivores. But, scientists wrote the text in an easy-to-read format so practitioners could easily apply its cost-effective techniques.

Chapters include instruction on the use of animal track stations, remote cameras, hair collection sites, scat-detection dogs, and DNA and endocrine analysis data. The book also has a section on the statistical design and analysis of noninvasively collected information.

Determining the status of some carnivorous species is an ongoing challenge for government agencies, research institutions and nongovernmental organizations because the animals tend to be secretive yet extremely sensitive to human activity. Many populations have been decimated because of trapping, logging and fires.

Data derived from noninvasive detection methods can help land managers examine reintroduction areas, identify barriers to natural dispersal, plan habitat restoration needs and explore climate change implications.

Last February, an Oregon State University graduate student Zielinski supervised used techniques presented in the book to capture images of a wolverine, an animal whose presence was last confirmed in California in the 1920s.

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