CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: September 24, 2012

TO: Natural Resources Board

FROM: Cathy Stepp, Secretary

SUBJECT: Informational: Wolf data collection

In July 2012, the Natural Resources Board (NRB) asked the department to come to the September NRB meeting with its plan for evaluating the first wolf season. The goal of the request was to ensure that information would be collected that would increase knowledge and reduce uncertainty for future wolf harvest management decisions. The collected information should help the department and NRB make future decisions on wolf harvest quotas, permit levels, zone boundaries, and hunting methods. This information will also be useful for communicating with concerned stakeholders and citizens. The information will also be helpful for planning and conducting future depredation control actions. Finally, the information will be useful as the update to the state's wolf management plan moves forward. The department plans for data collection and research are evolving as staff discussions continue to take place; however, our current information gathering plans include the following.

Objectives:

The Department plans to collect the following information for the purposes of:

- Monitoring harvest magnitude and location
- Monitoring the wolf population size
- Determining reproductive rate of wolves
- Determining age structure of wolf harvest
- Modeling population change over time
- Monitoring wolf population health, including diseases and parasites
- Determining how quickly the quota is approached and reached in each zone
- Determining cause of death
- Determining where hunters and trappers pursued wolves
- Determining whether hunters hunted new areas if their primary zone closed early
- Determining methods used by hunters and trappers
- Determining degree of conflict among wolf hunters and trappers and with other recreationists
- Determining social parameters of the hunting and trapping experience
- Determining success rates of hunters and trappers for permit setting purposes
- Determining wolf sightings of hunters
- Determining degree of dog-wolf interactions (if dog use is allowed)
- Determining if and when dogs are trained on wolves
- Determining numbers of wolves shot but not retrieved
- Determining desired rule changes for the permanent rule
- Monitoring violations of rules

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- Monitoring impacts on the wolf population of depredation controls by landowners and USDA Wildlife Services
- Determining the location of hunter and trapper harvested wolves relative to locations of depredation sites
- Evaluating alternatives for estimating population size in a cost-effective manner

Methods and Data Collection

The following methods will be used to evaluate the wolf season:

Wolf harvest call in reporting and registration by successful hunters and trappers – Call in reporting will allow the department to determine harvest by zone, to determine how quickly quotas are being reached in each zone, and to close zones as quotas are reached. Specific location information will be gathered to determine which pack territories wolves came from. This specific information will also help the department establish a winter count by subtracting late harvested wolves from territories where track counts have already been conducted.

Specific information being asked of each trapper or hunting calling in will include:
Name; customer ID number; date, time, zone, and county of kill; sex of wolf; and radio-collar identification if present.

Specific information being asked of each trapper or hunter registering a pelt and carcass with DNR staff includes: method used; weapon or trap type; use of bait; use of dogs; GPS location (latitude, longitude), and date registered.

Survey of wolf licensees – A survey will be designed by a group of biologists, stakeholders and a social scientist. The survey will ask questions about quantity of effort, timing of effort, harvest, methods used (e.g. weapon, dogs, baits, time of day or night), wolf sightings, harvest method, unretrieved wolves, location of wolf pursuit, changes in location of wolf pursuit, wolf-dog interactions, use of public and private land, participation by friends and family, conflicts with other recreationists, conflicts with landowners, and desired rule changes for consideration in the permanent rule.

Survey of wardens – wardens will be asked about the number of violations observed, tickets or warning issued, conflicts observed among recreationists and with landowners, evidence or complaints of wolf-dog interactions, dog breeds observed, and for their input on potential regulations for the permanent rule.

Survey of wildlife managers – wildlife staff will be asked similar questions to the wardens, excluding violations.

Carcass Evaluations at Registration – Pelts and carcasses will be evaluated for evidence of method of kill, whether by arrow, bullet, foot-hold trap, cable restraint, or dog. Tissues will be collected for genetic studies and a potential genetic "capture-recapture" population estimation procedure. One tooth will be collected from each wolf for age determination. Reproductive tracts will be collected from females to determine reproduction success.

Pilot Wolf Health Monitoring Study – Department wildlife health experts will initiate a study to work with trappers and hunters to monitor the health of wolves and impacts of the wolf season. Fecal parasites will be collected to determine their prevalence. Tissue or fluid samples will be collected to evaluate prevalence of disease or disease exposure including: canine distemper virus, canine parvovirus, neospora, heartworm, eastern equine encephalitis, west nile virus, lyme disease, anaplasma, ehrlichia, and adenovirus 1&2.

Report by USDA Wildlife Services – USDA Wildlife Services will report the results of investigations into depredations, their location and level of depredation control effort, and the location and numbers of wolves removed.

Records of wolves dispatched by landowners with and without permits – Wildlife management staff will report the location, number, and date of wolves dispatched by landowners with permit or while wolves are in the act of depredating livestock or pets.

Wolf Track Survey – The department will continue to use staff and volunteers to conduct our standard winter wolf survey to produce a minimum wolf count as in past years. Additional volunteers will be recruited. A number of volunteer training sessions are planned.

Radio-telemetry – A subset of the wolf population will continue to be radio-collared and monitored with receivers on the ground and from airplanes to aid in monitoring changes in the population and responses to the season. Cause of death will be determined for any radioed wolves that die.

Alternative Population Estimation Methods – A group of department and university biologists are investigating alternative methods for estimating the wolf population both for monitoring and quota-setting purposes. It is expected that one or more of these methods may be initiated as a pilot project this year for comparison with our traditional track surveys. Our goal is to use the most cost-effective technique that allows for the level of management precision needed.