

(Wydeven *in litt.* 1999). There is also growing opposition to the translocation of depredating wolves, and at least one county board has passed a resolution opposing the relocation of additional wolves to that county. Residents in the area to where these wolves are moved are concerned that the depredation problem will recur in their area.

Due to the decreasing effectiveness of, and increasing opposition to, translocation of depredating wolves, as well as the high monetary and labor costs of such attempts, the States of Wisconsin and Michigan have requested the authority to carry out lethal depredation control measures, similar to what has been done by USDA/APHIS-Wildlife Services in Minnesota. As the wolf population grows in number and expands in range in those two States, those wolves will increasingly occupy agricultural areas and will be exposed to additional domestic animals as potential prey. We believe that the new special management regulations under section 4(d) of the Act will provide increased flexibility and efficiency in managing wolves and are consistent with conservation of the gray wolf (see the *Special Regulations under Section 4(d) for Threatened Species* section below).

Based upon depredation control statistics from Minnesota, we expect the lethal control of depredating Wisconsin and Michigan wolves to be very small during the next few years. Data from Minnesota show that an expanding wolf population's increasing exposure to domestic animals will likely lead to increased depredation incidents, and the need for additional lethal control of those wolves. From 1980 to 1984, with a late winter wolf population of about 1,350 animals, an annual average of 2.2 percent of the Minnesota wolf population was killed by USDA/APHIS-Wildlife Services to reduce depredation problems. From 1985 to 1989, with a late winter wolf population averaging about 1,600 wolves, the annual average of wolves killed for depredation control increased to 3.0 percent. Additional increases have occurred in the 1990s.

With the Wisconsin and Michigan (Upper Peninsula) late winter wolf populations at about 250–350 in each State, we estimate that an average of about 2 to 3 percent of those wolves will be taken annually through lethal depredation control actions in response to attacks on livestock. This will be about 6 to 10 wolves in each State. Given the average annual population increases of 19 to 24 percent over recent years in each of these States, the effect of such levels of lethal depredation control will not prevent the continued growth of the wolf population in either

State, and will probably be so small that it does not noticeably slow that growth over the next few years. Wolf recovery will not be affected in either State. Reporting (within 15 days) and monitoring requirements will ensure that the level of lethal depredation control is evaluated promptly and can be curtailed if necessary. Therefore, we do not believe that lethal livestock depredation control will be a significant threat to the future of wolves in either Michigan or Wisconsin, or that it will result in a need to reclassify those wolves back to endangered status in the foreseeable future.

In recent years there has been an increase in the number of dogs attacked by gray wolves in Wisconsin, with 17 killed and 1 injured in 2001. In almost all cases, these have been hunting dogs that were being used for, or being trained for, hunting bears and bobcats at the time they were attacked. It is believed that the dogs entered the territory of a wolf pack and may have been close to a den, rendezvous site, or feeding location, thus triggering an attack by wolves defending their territory or pups. As many as 7 or 8 wolf packs may have been involved in the 2001 attacks on hunting dogs (WI DNR unpublished data). The Wisconsin Wolf Management Plan States that “generally only wolves that are habitual depredators on livestock will be euthanized” (WI DNR 1999a). Furthermore, the State's draft guidelines for conducting depredation control actions on wolves that retain a Federal threatened status say that no control trapping will be conducted on wolves that kill “dogs that are free-roaming or roaming at large.” Lethal control will only be conducted on wolves that kill dogs that are “leashed, confined, or under the owner's control on the owner's land” (Wisconsin Wolf Technical Committee 2002). Because of these State-imposed limitations, we do not believe that lethal control of wolves depredating on hunting dogs will be a significant additional source of mortality in Wisconsin.

Michigan has not experienced as high a level of dog attacks by wolves, although a slight increase in such attacks has occurred over the last decade. The number of verified attacks was one dog killed in 1996, three (two injured, one killed) in 1999, and three killed in 2001. Similar to Wisconsin, MI DNR does not intend to trap and move wolves that depredate on free-ranging dogs. However, trapping and relocation of wolves would be considered if wolves have killed confined pets and remain in the area where more pets are being held (Hammill *in litt.* 2002).

The new special regulation that authorizes depredation control in Wisconsin and Michigan requires that wolves killed for depredation control purposes be reported to us within 15 days. Thus, we will be promptly alerted if an unexpected number of depredating wolves are killed under the new special regulation, and we can initiate corrective action, if necessary.

Since wolves were protected under the Act, only one wolf has been killed for depredation control purposes in Wisconsin and Michigan. That adult wolf was killed by the WI DNR in 1999, under the provisions of a permit that we issued to deal with that specific instance. This was done to end a chronic depredation problem at a private deer farm after the failure of extensive efforts to live-trap and remove the wolf (WI DNR 1999b).

For both North Dakota and South Dakota we had anticipated potential wolf depredation problems associated with mostly single, dispersing wolves from the Minnesota and Manitoba populations. To cope with these anticipated depredations we have had a “Contingency Plan for Responding to Gray Wolf Depredations of Livestock” in place for each State for several years (Service 1992b, 1994b). In partnership with USDA/APHIS-Wildlife Services and State animal damage control agencies, the contingency plans provide for the capture and permanent transfer to American Zoo and Aquarium Association (AZA)-approved holding facilities, such as zoos, captive breeding centers, or research facilities, of all depredating or injured/sick wolves in North Dakota and South Dakota. The lethal control of depredating and injured/sick wolves is authorized by the plans only if no AZA-approved holding facilities could be identified. Verified wolf depredations occur approximately once every other year in North Dakota, with the most recent occurring in June of 1999; there have been no verified wolf depredations in South Dakota in recent decades. To date, in neither State has it been necessary to implement either the nonlethal or lethal control measures authorized under the contingency plans, although confirmed wolf sightings and some incidents of wolf depredation continue to occur.

North Dakota and South Dakota are recognized as lacking significant potential for restoration of the gray wolf, and neither our Eastern Recovery Plan nor our Northern Rockies Plan includes those States in its list of possible locations for restoration of gray wolf populations (Service 1987, 1992a). Therefore, lethal control of depredating wolves in these two States will not