Reform at Last for the Lead Shot Controversy

M. Leah Wright
Gregory Tolbert
In the 1991-92 waterfowl hunting season, the long awaited and extensively debated ban on lead shot will finally become a reality. In June, 1986, the Fish and Wildlife Service instituted a plan to phase out lead shot, beginning with a limited ban during the 1986-87 hunting season and culminating in a nationwide ban by 1992. The issue, however, is still subject to much controversy and the implementation of the plan is still a major concern. This article will explore the rationale for the Fish and Wildlife Service's ban on lead shot and examine the adopted steel shot alternative. Finally, this article will discuss the difficulty in implementing such a ban.

To support their position, proponents of banning lead shot point to the environmental damages caused by the shot. Lead shot from waterfowl hunting accounts for 3,000 tons of lead being deposited into the environment annually. Instead of remaining on the ground undisturbed, the pellets are ingested by waterfowl, which then suffer from lead poisoning. While there may be other causes for lead absorption into the tissue of waterfowl, "consumption of spent lead pellets by waterfowl is the major source." The extent of the damage caused by lead shot is significant. In 1959, the Illinois Natural History Survey published an exhaustive study by Dr. Frank Bellrose which concluded that lead shot ingestion "kills from 2 to 3 percent of the fall populations of all ducks and geese in North America each year." Although this may seem trivial, it does in fact result in an extensive unneeded loss of waterfowl. Using present fall population estimates, this translates into an annual loss of about 1.5 million ducks and 80,000 geese. Other estimates place the number of waterfowl lost to lead poisoning as high as 3 million annually. These figures do not include the over 100 bald eagles that have died since 1963 as a result of eating lead-poisoned waterfowl.

The ban on the use of lead shot will prevent the ingestion of lead pellets and the corresponding death of waterfowl. However, the search for a non-toxic, practical substitute that is acceptable to hunters has caused problems. Presently, the alternative most favored by the Fish and Wildlife Service is steel shot. The goal of the steel shot requirement is "to stop the accumulation of spent lead pellets in areas where they cause lead poisoning problems." In this regard, the steel shot alternative is a sensible solution to the current problems caused by lead shot. Its ingestion is not toxic to waterfowl. However, opposition exists to the use of steel shot.

Hunters oppose steel shot primarily for two reasons. First, they claim that steel shot is not as effective as lead because it is lighter and does not carry as well, resulting in the crippling of more birds. This argument, however, has been refuted by a number of studies. "There have been more than twenty-five years of testing of substitute steel shot. In more than fifteen major tests by Federal agencies, State agencies, and the arms industry, separately and in combination - all kinds of tests, fixed birds, birds in free flight, fixed shotguns, shotguns in the field, professional shooters, observed shooters - the test results differ hardly at all." In fact, "up to 40 yards, there is little noticeable difference between available steel and conventional lead loads." As a result, "all previous field hunting tests have shown that lead and steel loads bag and cripple essentially the same numbers." Even under the worst case estimates, "the maximum estimated crippling losses from steel shot, with steel shot required nationwide, would be in the order of 370,000 birds. That's about one-fifth to one-tenth the extent of the lead poisoning loss." Based on this opinion, and using a strict cost-benefit analysis, it makes sense to ban lead shot and use steel shot.
Second, opponents of steel shot also point to the higher price of steel shot as a reason to reject its use. While it is undeniable that expense is a factor, proponents of steel shot argue that this is not a sufficient reason to reject the use of steel shot. Opponents fail to consider that lead shot is cheaper because it is produced in greater quantities. As with most products, there are economies of scale associated with production that tend to decrease prices as output increases. In addition, price should be only a relatively minor consideration when dealing with environmentally dangerous substances. In the final analysis, the question comes down to whether we should permit 1.5 to 3 million waterfowl to be poisoned annually when there is a nontoxic practical substitute readily available.

It is important to discuss the implementation of the Fish and Wildlife Service's plan. The problem of lead shot poisoning has been known for over one hundred years but until now the Fish and Wildlife Service has not been overly zealous in their issuance of regulations pertaining to the use of lead shot.

The judicial system, however, has dealt with the issue. In June 1985, the National Wildlife Federation requested an injunction banning the use of lead shot in parts of California, Illinois, Mississippi, Oklahoma, and Oregon. The United States District Court in Sacramento granted the injunction for 22 counties in 5 states. Noncompliance would result in the banning of waterfowl hunting altogether.

Almost one year later, in July 1986, the same court dismissed a suit brought by the National Wildlife Federation calling for an immediate ban on lead shot throughout the 48 contiguous states. Judge Garcia's decision to dismiss the suit was interpreted to be in support of "phase out" plan announced in June the Department of Interior. According to precedent, it is for the Secretary of the Interior, not the court, to balance the competing interests and it is not appropriate for the court to substitute its judgment for the administration's.

This decision was undoubtedly frustrating to the National Wildlife Federation because they have had more success at enforcing regulations through the courts than through the Department of Interior. The Federation had witnessed previous attempts made by the executive branch to deal with the steel shot problem and they felt something more was needed.

These "previous attempts" began in 1976, when the first non-toxic shot areas were established. The Secretary of the Interior, Thomas Kleppe, announced: "Areas where steel shot must be used will be identified jointly by the Fish and Wildlife Service and the State Fish and Game Department." Despite the reasonableness of the plan, it was not well implemented. The departments charged with wildlife management in many states, including Tennessee, Arkansas, Iowa and Maine, were not contacted by, or got little or no cooperation from, the Fish and Wildlife Service in spotting trouble areas. Other states, including Idaho, Nevada and California, felt that the mortality rates estimated by the Service were too high and that there was not a lead shot problem within their borders. As a result, the Fish and Wildlife Service placed bans where they thought appropriate, without concern for the state's or other interested parties' views. The federal government's lack of reliance upon local sources of information concerning waterfowl management led to state resistance to enforcement of the ban.

In 1978, the Fish and Wildlife Service placed a ban on lead shot, this time using a more systematic approach. The flyways of waterfowl were examined, nesting and migratory habits accounted for, and bans were placed in the problem areas that were identified. By 1985, there were 33 nontoxic shot zones, accounting for approximately 30% of the annual waterfowl harvest. This was a vast improvement over the fledgling attempts at regulation in 1976, but still allowed in excess of one million waterfowl deaths a year attributable to lead poisoning.

Finally, in June 1986, the Fish and Wildlife Service initiated a phased ban on the use of lead shot resulting in a complete nationwide
prohibition by the 1991-92 hunting season. The plan will substitute the use of steel shot immediately in areas where the lead found in digestive tracts of waterfowl met or exceeded twenty birds per square mile. The criteria will progressively be lowered, until a complete ban is imposed in 1992.21

Opposition to the implementation of the ban is centered mostly in hunters. Their arguments range from concerns about price differences between lead and steel shot and even damage to human teeth from biting harder steel shot while eating waterfowl, to arguments about the increased rate of crippled waterfowl caused by the lighter steel shot. The hunters' attitudes can be changed, however. In fact, "there are a few examples, Iowa and Nebraska among them, where a well run educational campaign by state fish and game agencies resulted in hunter acceptance of steel loads."22 Articles in sportsman's magazines will help to educate the hunting public. The National Wildlife Federation already conducts clinics teaching hunters to use steel loads. Thus, an effective promotional campaign by the government and such groups as the National Wildlife Federation may be able to overcome much of the present opposition.

The real problem with implementation is enforcement, and that responsibility lies with the states. Because of earlier conflicts, such as the ineffective 1976 ban, relations between the states and the federal government on this issue are not cordial. State resentment over federal intervention is so substantial that an amendment to the appropriations bill for the Department of Interior was passed in 1977 known as the Stevens' Amendment. It stipulated that no funds could be used to enforce the steel shot regulations without the state's agreement.

A major problem could result if a state refused to agree to the federal regulation. The only alternative left to the Secretary of the Interior would be to ban all waterfowl hunting. Such an extensive ban would do more damage to waterfowl than unrestricted use of lead shot.23 The sale of Federal Duck Stamps to hunters accounts for millions of dollars each year, with the proceeds being used to protect and enhance duck breeding habitats. If a ban on waterfowl hunting were instituted, these funds would cease. If the enforcement of nontoxic shot regulations became a point of contention between a state and the federal government, a stalemate could result.

Obviously, this would be an unacceptable situation to everyone. The next question would be whether courts could force states to approve the use of funds for enforcement after the Senate gave them the power to deny these funds. There may also be a problem with the Department of Interior's willingness to litigate the issue. After Judge Garcia's decision to dismiss, William Horn, the Secretary of Fish, Wildlife, and Parks of the Fish and Wildlife Service announced he was pleased that the issue was, "back in the hands of professional resource managers instead of leaving it up to the lawyers and courts."24 The outcome of any future confrontations would be hard to predict.

In the opinion of the authors, the Fish and Wildlife Service should be applauded for banning the use of lead shot. There exists a non-toxic, practical substitute, readily available. Therefore the cost to the environment from continuing to allow the use of lead shot is simply impermissible. The question that remains is whether the ban will be enforced. Since the enforcement depends on the cooperation of state and federal agencies, the result is unsure. Conflicts may or may not arise, although the past history of nontoxic shot programs point to a rocky road ahead.
END NOTES

3Hearings, supra note 2, at 11 (testimony of Lynn A. Greenwait).
5Id. at S11, col. 1.
6Hearings, supra note 2, at 63 (testimony of National Wildlife Federation).
7Bryant, Plan to Phase Out Lead Shot, N.Y. Times, July 6, 1986, at S9, col. 4.
8Hearings, supra note 2, at 25 (testimony of the Secretary of the Interior).
9Hearings, supra note 2, at 63 (testimony of The National Wildlife Federation).
10Id. at 63.
11Brister, Getting Ahead with Steel or Lead, Field and Stream, Oct. 1983 at 96.
12Hearings, supra note 2, at 63 (testimony of the National Wildlife Federation).
13Hearings, supra note 2, at 47 (Fish and Wildlife Service Agency Regulations).
15Bryant, Plan to Phase Out Lead Shot, N.Y. Times, July 6, 1986 at S9, col. 3.
17Hearings, supra note 2, at 20 (testimony of Ray Arnett).
18Id. at 20-21.
19Id. at 21.
21Waterfowl Hunters May Need Steel Shot in 1987, Virginia’s Outdoors, Oct. 1986, at 17, col. 3.
23Bryant, Plan to Phase Out Lead Shot, N.Y. Times, July 6, 1986, at S9, col. 4.