

Gear, Gunning, and Gundogs: Alaska Waterfowling '91

by Thomas C. Rothe

The 1991 waterfowl season will mark a turning point in the traditional technology of Alaska waterfowl hunting with the advent of non-toxic steel shot. After decades of debate and uncertainty, the national conversion from lead to steel is in place and the Alaska Board of Game has adopted a requirement to use steel for hunting waterfowl, snipe, and cranes. (See Dan Rosenberg's article on lead poisoning in *Alaska Fish and Game* magazine September/October, 1988). Nearly everything about steel shot represents new technology: its manufacture, performance in shotguns, external ballistics, and field applications. However, most hunters will not have to be rocket scientists to learn how to bag waterfowl with steel shot. There are some simple principles to bear in mind:

Steel is lighter than lead. To compensate for steel's lighter shot weight and more rapid loss of energy beyond 40 yards, the general rule is to use two sizes larger steel shot than you would with lead (example: #2 steel instead of #4 lead). Extensive ballistic testing under hunting conditions has resulted in recommended best loads for different hunting situations (see chart). Overall, #3 steel is the best duck load and #BB steel is most efficient for Alaska's medium-size geese.

Steel is harder and deforms less. Because steel shot is rounded and deforms less than soft lead during firing, steel flies more "true" to the target in a more compact swarm of pellets. Shot strings (the "swarms") of steel are only 80 percent the diameter of lead and only 1/2 to 2/3 of the length. This suggests two critical adjustments: (1) more open chokes, improved cylinder or modified, will help compensate for steel's tighter patterning and improve the "hitability" of your load, and (2) the shorter shot string reduces the margin for error in sloppy shots, requiring the hunter to be a better shot to maintain bagging success rates.

Steel loads can approximate lead in performance. If we understand how steel shotshells are made, we can select steel loads that approximate lead loads in performance without extra cost. For example, even though we have to use larger shot sizes in steel to retain equivalent energy, steel shotshells can accommo-

date more pellets because a cushioning wad is unnecessary. By comparing these factors, we will find that we can get effective energy and patterning out of shells that have a lighter shot charge. Light loads also cost less and deliver less recoil.

No discussion of steel shot is complete without addressing important considerations for our scatterguns. Here, too, steel shot technology requires new knowledge by hunters about shotguns and chokes. There is a great deal of misinformation that has generated anxiety in many shotgunners about steel shot. There are two main questions to consider: (1) what, if anything, will happen to your gun from using steel shot? and (2) how will your gun choke affect the performance of steel loads?

To answer the first question, there has never been a documented case of steel shot blowing up a shotgun barrel. All commercial shotshell loads are proof-tested to ensure safe pressures and modern steel shells are made so the pellets never touch the barrel of the shotgun. The singular effect that can occur, from using large sizes of steel shot or magnum buffered lead loads through tight chokes, is ring-bulge, a slight expansion of the barrel at the back edge of the choke ramp. This is usually difficult to see and does not affect the patterning performance of the gun. By far, the vast majority of recent American-made shotguns are immune to the problem, but if you are concerned about your gun contact the manufacturer or give us a call.

Because gun damage is not a significant problem and ring-bulge is only a cosmetic effect, the hunter's primary concern is getting the most effective waterfowl killing pattern out of steel shot loads from our gun-choke combination. At this point, because of numerous discussions I have had with shotgun shooters, I must say: "Stop! Put that hacksaw down and don't lay out big bucks to the gunsmith yet!" Street advice indicates that in order to use steel shot you need to modify your shotgun and shorten the barrel. In fact, the recommendation of open chokes for better patterning with steel is valid (see chart), but barrel length has little or nothing to do with pattern performance. Barrel length does, however, affect your sighting plane and gun balance

during your swing; chopping off a couple of inches could create a new problem you don't need. Here are some simple steps to evaluate your gun and choke:

1. Pattern your gun first. Each shotgun and its choke patterns differently, right from the factory. Shoot several paper targets at 40 yards with #6 steel and measure the pellet count efficiency in the standard 30-inch circle. If the pattern is satisfactory, you are home free. Make sure to test each hunting load you intend to use.

2. If your patterns are too tight and you have an integral choke, you can have a reliable gunsmith re-bore the choke to more open specifications (usually under \$60). Typically, only *full* chokes throw unsatisfactory patterns, and double-barrel owners need only to have one barrel re-done.

3. Only if you want the versatility of screw-in choke tubes (for everything from skeet and quail to long-range goose shooting) should you consider the major investment (\$150+) of having them installed. And, *Beware!* All tube systems are not safe from sticking when large shot sizes are fired through them. Check with the manufacturer or call the nearest office of Fish and Game. We also maintain a toll-free number (in-state) to answer your questions. Call (800) 478-SHOT. We will do whatever research is necessary to answer your questions. We look forward to helping you to make your waterfowling experiences safe and successful.

Gunning For Waterfowl: The Art and Science

Prior to the North American duck crisis of the 1980s, over five million people hunted migratory birds annually in the U.S., harvesting 12-15 million ducks and 1.5 million geese each year. Alaska has averaged about 110,000 ducks and geese. Unfortunately, on average, one in every five waterfowl shot by hunters is not rendered to the game bag; they recover, survive as injured birds, or die. Even under ideal circumstances, such as a study in Illinois where skilled shooters and guides were involved, 15 percent of the birds were lost. Any experienced waterfowler will attest to the challenge of cleanly bagging ducks. Here are some major factors contributing to lost (and missed) birds, and an efficiency checklist for planning your hunt strategy:

Species of Bird—Each kind of bird behaves differently, requiring the hunter to know and anticipate the prey in order to make an effective shot. Body size, flight behavior, habitat preferences, and social habits are all important concerns. Summer duck watching is a good way to prepare for fall hunting. Knowing your ducks will make the hunt more interesting and keep you out of trouble with the small allowable bag limits on pintails and canvasbacks.

Habitat and Local Conditions—Hunting in dense marshes presents substantial risks of losing birds that are downed and presents different challenges from recovering birds on “big water.” In Alaska, it is not unusual to lose birds on outgoing tides or down-river. Plan ahead, get to know the hunt area in advance, and watch every shot bird carefully until it is down. Having a boat and dog where they are needed is essential.

Hunt Methods—Pass-shooting can result in bird losses as high as 60 percent, in contrast to more careful and accurate shooting available at closer ranges over decoys. Pass-shooting at any distance requires good gun handling and practice, and it is the

Birds	Max. Range (Yds)RECOMMENDED.....		
		Shot Size	Max. Load (Oz)	Choke
Mallards Pintails	65	1	1 1/8	Full
Mallards Pintails	50	2, 3	1	Improved cylinder Modified
Widgeon Scaup	50	3, 5	1	Improved cylinder Modified
Teal	50	5, 6	1	Modified, Full
Geese	65	BBB**	1 1/4	Improved modified***
Geese	50	1, B, BB	1 1/8	Modified

*Based on testing as of January 1990. Testing is ongoing and subject to change.
 **For Canada goose hunting in SE Alaska & Sandhill crane hunting #T shot, 1 1/4 oz., with Improved Modified Choke is recommended.
 ***An Improved Modified Choke is between Modified and Full Choke.
 Steel #4s exhibit relatively poor performance.

most abused technique of unskilled hunters. On the average, jump-shooting results in the fewest lost birds. It may require an initial investment of time, but far more birds can be bagged, more enjoyably, through learning the arts of calling and decoying birds into your effective range, than through all the desperate rapid-fire, sky-busting, magnum-thumping, anti-aircraft tactics used by those who can't shoot well!

Hunter Skills—Besides the necessary knowledge and experience about gear and hunting strategies, the most important factors in cleanly bagging waterfowl or losing wounded birds are the gun handling skills and trigger-pulling judgment of the individual hunter. The most difficult problems are learning how to swing a shotgun on a moving bird and when to fire a shot. A good wingshooter needs as much as or more athletic ability and coordination as does an accomplished golfer or baseball hitter, yet there are many hunters who leave their shotguns in the closet from the season close to the next opening day, or expect to pick up the scatter-gun cold and hit a home run the first day out. Like learning about ducks, off-season study and practice-practice-practice are the key to a satisfying hunt.

By far, the most common and serious error committed by waterfowlers is underestimating distances to their targets and attempting shots that are too long for their own skills and chosen ammunition to guarantee a clean kill. Beyond 35 yards, struck birds are lost at twice the rate of birds that are shot at closer ranges, and the losses increase phenomenally beyond 50 yards. For the sake of personal satisfaction and conservation of migratory game birds, it is critical that waterfowlers learn the effective ranges of their ammunition, how to judge distances in the field, and the limits of their own shooting abilities. Yet again, off-season practice is the only answer.

Gundogs—

The Waterfowler's Best Friend

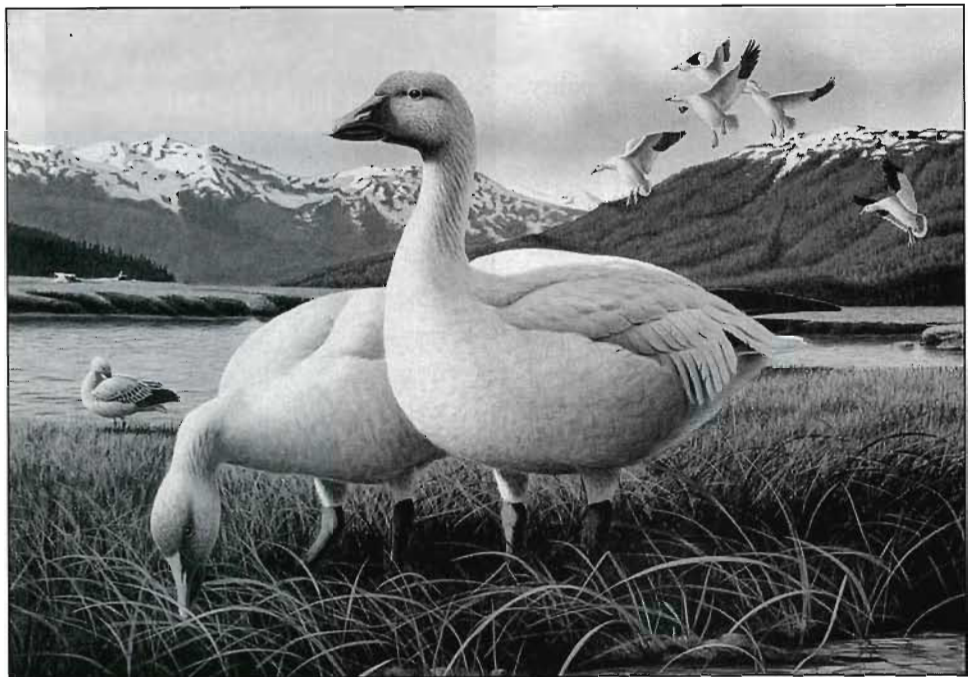
I often have reason to re-evaluate my choice to live with three active hunting dogs and a spouse who prefers dog training over pure leisure (sleep) on the weekends. But as I scroll through the “dog-day” memories . . . old Charlie-the-labrador’s midnight sneak into Bill’s bunk after a hard Susitna Flats opening day . . . Miss Ruffian making a “pop-fly” catch on Ann’s first white-fronted goose . . . and 6-month-old Grizz staunchly pointing an eastern Oregon chukar—the pleasures and purposes of living with bird-dogs are reaffirmed.

Although many people are not enthusiastic about feeding, training, and living in close quarters with a rather large, rambunctious canine, mankind has developed unusually firm bonds with dogs that transcend mere companionship and household defense. In my view, these bonds are most meaningful in the many uses we have for working dogs, and the most artful in a bird hunter’s partnership with a trained dog.

Over the past 4,000 years, hunters have bred and trained a wide variety of bird dogs to search for, attract, point, flush, trail, and retrieve game birds. The common goal of their efforts has been to ensure an efficient, non-wasteful harvest of wildlife. In our present era of shrinking wildlife habitats, more intensive use of fewer public hunting areas, and the need for more careful conservation of bird resources, hunting with bird dogs not only ensures that we receive the rewards of our efforts in birds for the table, but also adds a satisfying new dimension to our enjoyment in the field.

As I mentioned in the section above on gunning, the unfortunate loss of unretrieved game birds results from the nature of wing-shooting with a shotgun, but most of it is directly related to hunter skills and choices made by hunters. The choice to hunt with or without a dog is an important hunting and conservation decision. The use of trained dogs can reduce the losses of downed waterfowl by up to 70 percent, depending on hunting conditions. In North America only 18-20 percent of waterfowl hunters use dogs, but it is interesting that recorded rates are highest in British Columbia and Alaska. In a 1984 survey of Alaskan hunters, the Alaska Department of Fish and Game was surprised to learn that 31 percent used dogs for waterfowl hunting. The highest level of use was on Kodiak (46 percent) and the Alaska Peninsula (41 percent), where sea duck hunting and retrieving in marine waters are common. You can bet that Alaska’s duck dogs earn their keep and save a lot of birds for our special winter meals.

Even if owning a gun dog is not for your family, most hunters who use dogs welcome the opportunity to work the dog with friends and help others recover birds in the field. A well trained dog is a joy to watch and is especially appreciated when skim-ice



1991 Alaska duck stamp featuring snow geese is required for waterfowlers.

is on the pond, the tide is running, or in salvaging your dignity when retrieving a bird you did not shoot well. If you are interested in raising and training a gundog, there is plenty of help available.

There are three American Kennel Club (AKC) retriever clubs and three North American Hunting Retriever Association (NAHRA) clubs located in Anchorage, Fairbanks, and the Kenai Peninsula. AKC has a long history of promoting breeding and training of pure-bred working dogs and conducting competitive field trials and NAHRA tests of dogs against standards of performance. Members of all these clubs are avid hunters and can offer a wealth of advice, training opportunities, and hunting friendships.

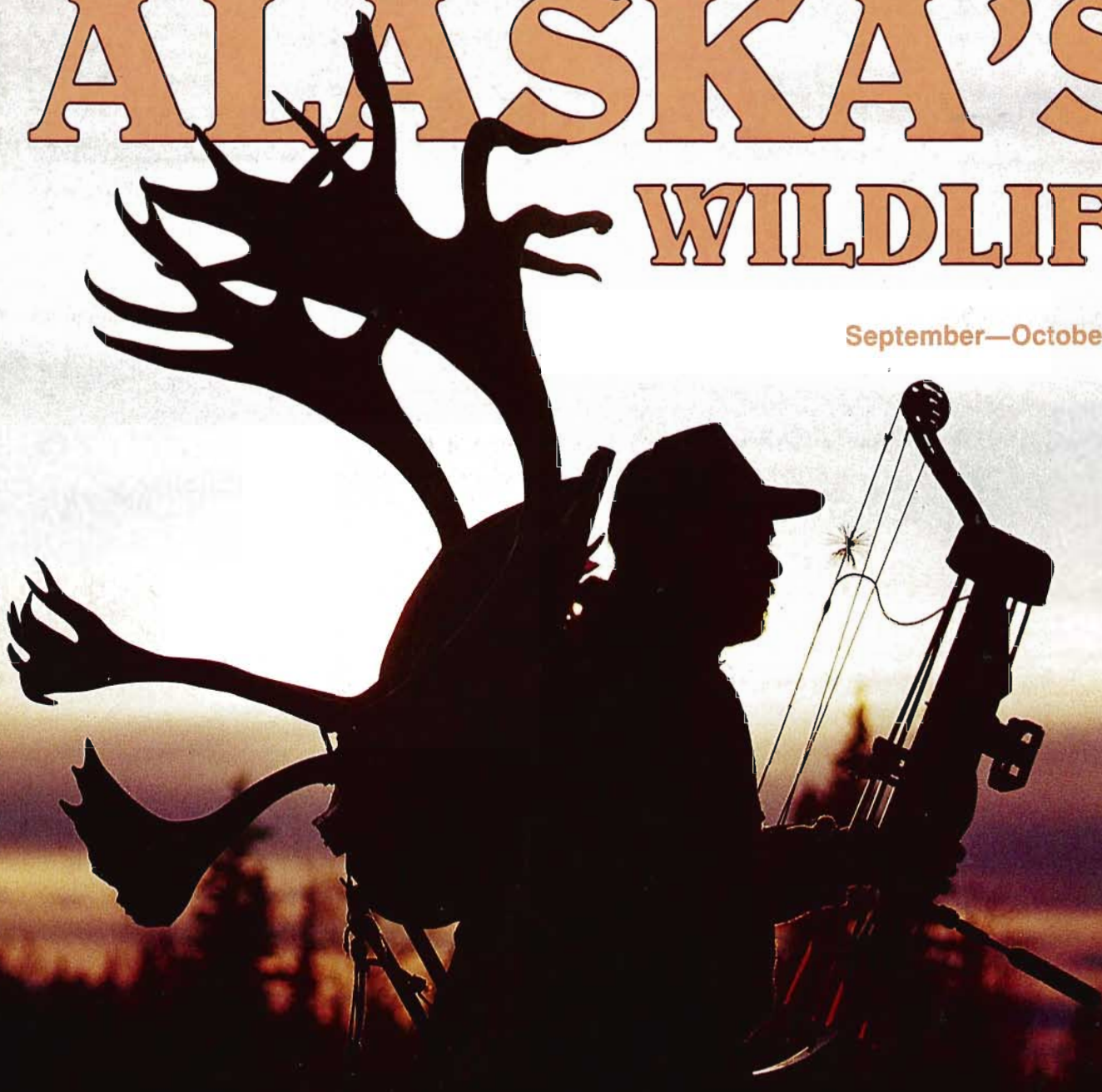
Throughout this article, I have tried to emphasize the importance of being knowledgeable about waterfowl and the gear used in waterfowl hunting, both for more rewarding experiences and conservation of game bird resources. After all, the responsibility for maintaining waterfowl hunting opportunities and an efficient harvest of migratory birds rests in the minds and trigger fingers of hunters in the field. With the level of public scrutiny on hunting and the educational resources that are available to waterfowlers today, there is no room for the excuses that “I can’t cleanly kill birds with steel shot,” “I don’t have time to practice shooting,” and “I couldn’t tell what kind of bird it was when I shot.” If you take full advantage of all the opportunities to learn and practice the hunting arts, you can extend your enjoyment of waterfowling throughout the entire year—probably to the chagrin of your spouse, employer, and all the relatives that expect you to entertain them. Check out some videos, go to the shooting range, or join a gundog club—it will pay off in green-heads and great memories!

Thomas C. Rothe serves as the waterfowl coordinator, Division of Wildlife Conservation, ADF&G, Anchorage.

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