

REDUCING CRIPPLE LOSS – PART II

By Howard N. Ellman

When steel represented the only non-toxic option, we had to use it, despite its gross ballistic inferiority to lead shot. Manufacturers attempted to minimize steel's shortcomings in weight by increasing muzzle velocities by as much as 25%, the idea being that greater speed would compensate for lighter weight and produce equal or greater hitting power. That concept works – but only at short ranges.

Relatively light, round pellets bleed off speed at a rapid rate because the greater the muzzle velocity, the greater the rate of deceleration, with the result that even the fastest steel loads lack reliable down range killing energy. Think of a ping-pong ball. No matter how fast you fire it from a pneumatic gun, it will lose all its energy and momentum much sooner than a glass marble of similar size propelled at half the speed. An extreme example perhaps, but it illustrates the point.

Hunters switching to steel shot immediately noticed a startling increase in their cripple-loss rate. Birds fell apparently dead, only to swim off before they could be retrieved. Rare indeed was the kill that lay where it fell. Most birds shot down with steel had enough life left to move at least a little – often enough movement to create retrieving problems. Experts claim that this phenomenon is a product of steel's reduced shocking power attributable to its lighter weight, and its hardness that keeps it from imparting energy to the target in the manner of softer materials that deform on contact. Whatever the reason, the result was too obvious and too universal to be discounted.

In time, hunters adjusted to steel. The performance of lead faded in memory. Steel ammo improved, a product of heroic efforts by the manufacturers. The consternation and general bitching over the shortcomings of steel shot subsided. Hunters got used to cripple loss, accepting it as normal. The improving ammo created the false impression that the problem was getting solved, when in fact, it was improving only marginally and no improvement could hope to transcend the inherent shortcomings of the material. As any public lands hunter knows only too well, sky-scraping came back into vogue, as hunters burned ever-increasing numbers of shells on the lowest of low percentage shots.

Understanding their market, the manufacturers concentrated on three-inch – and then three and one-half inch – shells as hunters demanded ever larger loads, as though that would compensate for steel's inherent deficiencies. It did not and could not, but in my opinion, those over-sized loads and the claims made for them encouraged high-gunning and reckless expenditure of ammo with an inevitable increase in cripple loss.

Today, we have several non-toxic alternatives that use material with a much higher specific density than steel. Two of those options – tungsten matrix and nickel tungsten --

are actually as heavy or heavier than lead. I think they perform in the field better than lead ever did, due to the quality of the materials as well as the shotshells themselves. I know a growing number of hunters who share that opinion. Even so, only a small minority of hunters use them. Why? Because they are two or three times as expensive as steel. Over and over again, I have heard hunters snort at the very thought of using such expensive shells. Some of these snorters think nothing of drinking wine at \$50 per bottle and driving huge SUVs at 12 mpg – but consider \$1.60 per shotshell either crazy or stupid.

I submit that the cost of shot shells is one of the minor expenses of waterfowling. The extra cost of gasoline in that SUV for the round trip to a single hunt probably covers the difference for several hunts' supply of shot shells (and if it doesn't, that hunter is probably shooting too much anyway). What are we talking about here? How many times a year do you shoot more than ten serious shots during a hunt? Is \$10 a hunt extra too much? Is \$15 too much? Skip that extra round of drinks that you don't need and you're square. Moreover, that cost differential is misleading in and of itself, because when you use loads that reliably anchor birds with one shot, you will use fewer of them.

Moreover, maybe it's a good idea for hunters to dwell on the cost differential. Worrying over the cost of that load in your chamber might inhibit those wasted shots, the parting salute that can only cripple if it cuts any feathers at all. Maybe it will encourage Leopold's imperative of economy, the "one-shot, one-buck" frontier ethic.

If limiting cripple loss is a moral imperative of ethical hunting, then hunters should reject steel and use the heavier materials, now that we have them. I recognize that some hunters are effective with steel – and an even greater number think they are. But why use it now that we have legal alternatives that perform as well or better than lead? (Think about it. If steel had come out while lead was still legal, would anyone have used it, even at a much lower price? Not for long, I can assure you).

Someone will inevitably try to turn this into a "class" issue. "Only rich guys use that expensive stuff. Working class hunters can't afford it." Wrong. The new loads encourage economy, a salutary goal in and of itself. Shoot better, shoot more judiciously, make more one-shot clean kills and you will reduce cripple loss with no appreciable increase in ammo cost.

In all candor, I worry more about the rich guys on this one. As the cost of shells means nothing to them, that cost won't impose the discipline we need to really address this issue. *We should use the best loads available because we want to increase the odds of recovering every bird we bring down, using a maximum of marshcraft and a minimum number of shots.*

If we take care of the ducks, the ducks will take care of us.
