

Setting The Best Trap

by J. Mark Shoup
associate editor, Pratt

Best Management Practices is a research program that will provide trappers and wildlife managers information about which new trapping devices are most effective and humane.



Mike Blair photo

In *Kansas Wildlife & Parks* magazine's July/August 2005 column entitled "Trapping Matters" (Page 39), I wrote that "a common misconception is that trapping is just plain inhumane." To counter this misconception, I made a number of assertions:

- what is commonly referred to as a "steel leghold trap" thought to break bones is actually designed to harmlessly restrain an animal by the foot;
- trapping is tightly-regulated;
- trapping is a valuable wildlife management tool;
- properly selected traps do, in fact, minimize or eliminate injury; and
- long-term, unbiased scientific research supports these assertions.

Last January, I had the opportunity to observe this research — called Best Management Practices (BMPs) for trapping in North America. I traveled with KDWP furbearer biologist Matt Peek and one of his hand-picked

trappers, Bill Wilgers, (selected for his skill in capturing bobcats) to check a study trap line north of Clay Center.

This research employed three different trap types targeting bobcats. (The Sterling MJ 600, the MB 650, and the size 1.5 Victor padded-modified were used this year, but more than a dozen other trap types have been tested on Kansas bobcats in previous years.). As many as 18 traps of each type (54 total traps) were set and checked on this line every day for 21 days.

This was the 20th day, and we caught two bobcats, which is considered a good day. I observed that neither animal appeared to be in pain or particularly distraught. One lay reposed in the sun while I snapped a picture. In both cases, the foot of the cat was held by the trap just above the pad, and the skin was not broken. From this brief experience, it appeared that BMPs were working, but I still wanted to know why, and

exactly what BMPs are.

BMP research is a cooperative effort funded by the International Association of Fish and Wildlife Agencies (IAFWA). The project was undertaken to collect valid scientific data that would help wildlife managers, trap manufacturers, and trappers develop and promote the most humane tools and techniques possible. If these ends could be met, wildlife managers and trappers could then assure the general public that the best traps and technology available were being employed in U.S. trapping programs.

But the books could not be cooked on this: a system of solid checks and balances eliminating all possibility for bias had to be developed, or the study would be a failure, no matter the results. Statistical legitimacy, not philosophical bias, was a must. Thus, biologists and statisticians, with input from trappers, developed a "double-blind" system for the BMP studies.



Matt Peek photos

New traps developed for BMP include features such as padded jaws, rounded thicker jaws, and offset jaws. Chains include swivels and springs to absorb shock. The goal is to develop traps that are effective on target species without causing injury.

Each trapper would be accompanied by a technician (usually a university wildlife student) throughout the study. (On the day I followed, Peek filled the role of technician.) The technician would record data and ensure that the trapper followed protocol, which was designed to eliminate trapper bias. For example, the trapper would pick the locations for trap sets, and only after the location had been selected would the technician identify the type of trap to be set there. Thus, the trapper could not intentionally favor one trap type over another.

Daily activity at each trap set would be recorded by the technician and captured animals sent to an independent laboratory where a veterinarian would perform a necropsy to determine the extent of injury to the animal. The vet would know nothing of the circumstances in which the animal was trapped. After necropsy, the vet would then use a trauma scale to determine the severity of injuries.

The scale, developed by biologists and wildlife veterinarians, assigns numeric values to each injury based on severity. "Mild traumas" ranged from two to 10 points and included such things as swelling or minor cuts. "Moderate traumas" ranged from 25 to 30 points and included more serious but non-life threatening injuries such as a tooth fracture or a broken rib. "Moderately severe traumas" included such injuries as a simple fracture at or below the joint of the foot. These injuries ranked from 50

to 55 points. Finally, "severe trauma" encompassed everything from amputation of three or more digits to death. All severe traumas scored 100 points.

Scores for all injuries were tabulated to achieve a final injury score. Any combination of injuries to an animal totaling 55 points or more was considered unacceptable, so traps had to achieve an average injury score less than 55 points to be recommended through BMPs. Additionally, at least 70 percent of the animals captured had to fall within the mild or moderate trauma range for the traps to be acceptable.

Because BMP research was initiated eight years ago, the same procedure has been followed in other states targeting species specific to different regions. Body gripping traps have been tested under a kill-trap protocol in Canada, and restraining snares (meant to capture, not kill) have been tested in Wisconsin with great success.

"The key to trappers' acceptance of this study is that it is a true field evaluation of trap performance," says Peek. "The trapper operates as he always



Mark Shoup photo

During the study, trappers set traps in the same areas with methods they have always used. Observers record data and ensure protocol is followed.

has, using the same baits and the same sets at the same spots he places his own traps.”

The ultimate goal is to discover which traps meet BMP standards. This means they have to be 1) efficient in catching and holding the animal, 2) create a low injury level, 3) be selective in catching the species targeted, 4) be practical for the user, and 5) be safe for the user.

In fact, most traps tested to date have passed BMP standards, lending credence to what trappers have been saying all along — that traps are not inherently cruel and dangerous devices. Even more compelling is the fact that 98 percent of the animals caught in the studies have been target species.

This latter point is important. A trapper wants to trap only the species of value to him, and he does not want to capture non-furbearers. In addition, in the case of a dog or other domestic animal being caught in a trap, it is critical that that animal not be permanently harmed.

The foothold traps used in the study I observed were nothing like the old toothed traps you see in museums or animal rights magazines. They were either padded or offset, meaning they don't close entirely. The offset traps also had thickened jaws designed to displace the force of the trap over a greater surface area of the animal's foot. Other modifications included shock absorbers on the chains, center swiveling of the traps, and rounded, smooth jaws.

This was the last planned year for bobcat



Matt Peek photos

The most recent BMP study in Kansas targeted bobcats. Soon, BMP criteria for bobcat, coyote, raccoon, red fox, muskrat and beaver will be completed.

testing in Kansas, and a bobcat BMP end-product is near. That product will be a user-friendly document recommending traps and trapping methods that meet the BMP criteria. In addition to the bobcat BMP, raccoon, coyote, red fox, muskrat, and beaver BMPs are at or very near completion. Eventually, BMPs will be developed for all harvestable furbearer species in the U.S., but they are intended to be “living” documents, and studies will be reinitiated as new traps or technology become available.

At this point, you may be

wondering if trappers will really use these things.

Peek has a convincing answer: “Just take a look at any trapper supply magazine or website, and you'll find that what they offer is what we're recommending. And it only makes sense; they are popular because they are efficient and safe. Trappers know that the more you reduce injury, the greater the chance of capture, and that's in their interests. Plus no one wants to unduly harm their catch; that just doesn't make sense. And if you capture and harm the farmer's dog, you're not likely to be welcomed back.”

You might also wonder if all this is necessary, since trapper numbers have declined in recent years. There are several answers. Perhaps the most surprising is that foothold traps have been used to save species on the decline. The river otter is



Mark Shoup photo

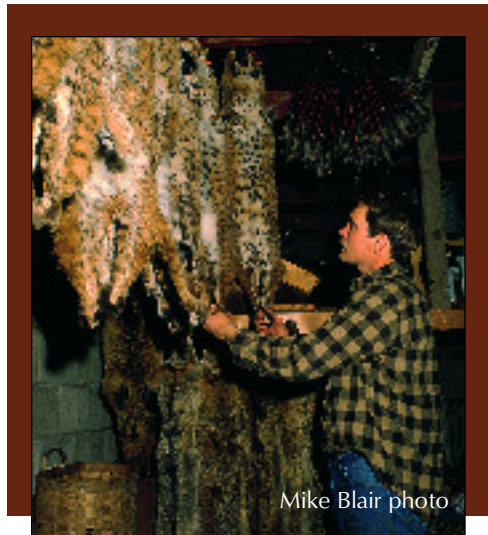
Traps are designed to hold furbearers without causing injury. Each animal caught in the study was sent to a veterinarian for a complete necropsy and injury score.

one example. Once close to extinction in the U.S., wildlife biologists have employed the assistance of trappers using foothold traps to capture and transplant more than 4,000 otters, helping establish populations in 18 states. This technique has also been used to restore populations of wolves, lynx, fisher, marten, beaver, bobcat, fox, opossum, and raccoon.

Trapping can also help wild species by keeping the balance of predator and prey when one or the other becomes overpopulated in a given area, preventing starvation and spread of disease. In some instances, trapping of predators can be used to protect endangered species. Trapping can also protect habitat when species such as beaver become destructive. And funding from furharvester and fur dealer licenses helps finance projects that manage and protect the habitats of many animals, not just furbearers.

Trapping has economic value as well. Fur clothing is the most common, but by-products from furbearers include artist's paint brush bristles, perfumes, fishing lures, boot-leather waterproofing, and in some cases, food. Trapping predators can also protect livestock and pets.

For trappers, trapping provides a wealth of information about the natural environment. By necessity, trappers must become expert naturalists, learning the signs, life cycles, and habits of not only the animals they pursue, but those they don't. When the numbers of these animals becomes out of balance — whether too many or too few — trappers are the first to know and report their con-



cerns to wildlife biologists.

One last important fact about trapping that the general public is often unaware of is that it is highly-regulated. It is mandatory that trappers be licensed, check their traps daily, tag their traps with their name and address, trap only in specified seasons, use specified sizes of traps, trap for certain species only in specified areas, and use specified traps for certain species. In Kansas, anyone born on or after July 1, 1966, must also take a certified trapper education course before trapping.

Trapping has been banned in California, Colorado, Massachusetts, and Washington, and Arizona has significantly restricted the use of foothold traps and snares. In these cases, animal rights activists, ignoring sound biology and playing emotion against logic and facts, have convinced an uninformed public that trapping is cruel and unnecessary. The results have been disastrous in many areas because the primary tools used to resolve conflict with furbearer species have been lost. For example, beaver populations in Massachusetts have more than doubled, causing massive

habitat destruction, flooding, and destruction of water wells.

Fortunately, wildlife biologists now have solid scientific data to prove that not only do recommended traps inflict minimal levels of injury acceptable by international standards, but trapping is beneficial to both wildlife and humans. But unless the public is educated — both formally and informally — these benefits could be lost. Hopefully, the data gleaned from the Best Management Practices research will prevent further erosion of this time-honored and important tradition. ♡

What are BMPs?

A practical tool for trappers of all skill levels, BMPs are carefully-researched recommendations designed to address animal welfare concerns and increase trapper efficiency. BMPs feature the latest scientific information, along with practical advice from experienced trappers and wildlife biologists about techniques and equipment.

What BMPs are available?

Currently, BMPs for eastern coyote are available, and BMPs for six other species will soon be published.

Facts about BMPs:

- In the U.S., 32 states participated in testing, and all 50 support BMPs.
- More than 50 types of traps have been evaluated, including standard models, offsets, and more.
- More than 150 trapper/technician teams have participated in field tests.