



A SIMPLE ENHANCEMENT FOR RODENT SNAP TRAPS

The Mouse that Didn't Get Away

A Contribution to the Series:

VERTEBRATE PEST MANAGEMENT CONCEPTS FOR HOMEOWNERS AND GREEN INDUSTRY PROFESSIONALS

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CONCEPTS IN PEST MANAGEMENT

Positive identification of pest species is crucial when selecting appropriate and effective management strategies from a host of options. This is extremely important regardless of the type of pest involved—mammal, bird, insect, weed, fungus, or microorganism. A thorough knowledge of the biology and habits of each pest is necessary. The more you know about a pest, the better you will be at managing it effectively. Oftentimes, pests cannot be readily seen; identification must then be inferred from less tangible 'sign' (e.g., damage, tracks, scat, mounds, and other indicators of its presence). Be observant, be innovative, be thorough, and always be safe!

RATS AND MICE – UNWELCOME GUESTS

The battle between rodent and man is as old, if not older, than civilization itself. Not only have rats and mice invaded the larder and table, but they've brought along with them a

lengthy list of dangerous diseases as well. "Rats carry bacteria, viruses, protozoa, and fungi; they carry

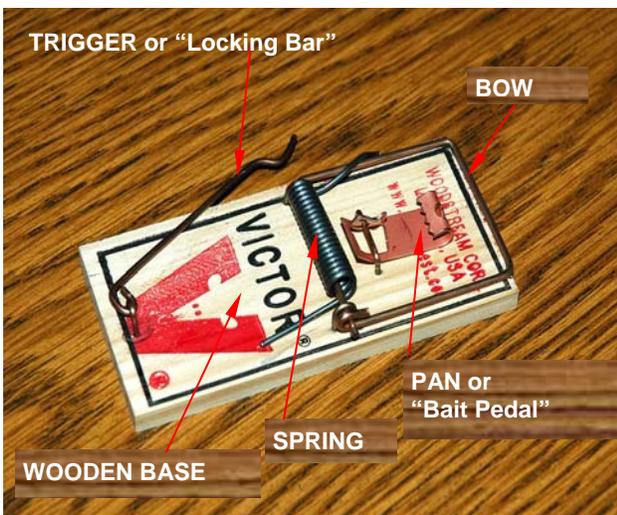
mites, fleas, lice, and ticks; they carry microbes up from underground streams of sewage; public health officials sometimes refer to rats as germ elevators.¹ A few of the infamous diseases they carry are plague, typhus, salmonellosis, trichinosis, typhoid and a great many others."^{2,3} "In just the past century, rats have been responsible for the death of more than 10 million people."¹ Rats and mice, together with the diseases and parasites they carry, have greatly impacted world civilizations for millennia.⁴

Sir Hiram Stevens Maxim (1840-1916), an American-born British inventor, is credited with inventing the common mousetrap that we recognize even today.⁵ A more inclusive term for the common mouse and rat trap is the *snap trap*. Both were a vast improvement over chasing elusive rodents about the house or barn with a

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club. The snap trap permitted the secretive placement of a device that would remain on the job 24/7. Another benefit of the common snap trap is that it represents Integrated Pest Management (IPM) at its non-toxic finest. Despite their grisly task, snap traps are remarkably humane, typically dispatching the rodent instantaneously. Mousetrap inventors and manufacturers have created and patented hundreds of designs, many of which are still in use today. Perhaps the most recognizable mouse trap in the United States is the traditional Victor Snap Trap. It is an older-style trap with a metal pan, or in Victor's parlance, a "bait pedal." See illustration below.

Trappers have been using the traditional model and numerous similar designs for decades. A newer Victor model, the Victor Easy Set, has a broad yellow plastic cheese-like pan. The Easy Set trap is sometimes referred to as a 'professional trap' and is capable of catching rodents by strategic placement with and without bait. Bait can be applied to the Easy Set trap and it can thus be "enhanced." But for our purposes, the traditional trap with the metal pan is the best choice. Both trap designs are rugged, dependable, inexpensive, and available nearly everywhere.



SNAP TRAP NOMENCLATURE

when grain and seed are present. Such items include bacon, chocolate, butter, and nutmeats.”⁶

Norway rats, on the other hand, “will eat nearly any type of food. When given a choice, they select a nutritionally balanced diet, choosing fresh, wholesome items over stale or contaminated foods. Rats prefer cereal grains, meats and fish, nuts, and some types of fruit.”⁷ Between rats and mice, virtually every kind of food enjoyed by man has also been enjoyed by our rodent neighbors. As a logical response, every imaginable food has been tried as bait to rid ourselves of these unwelcome guests at our table and pantry. But bait hasn't been limited to food items.

Snap traps have also been baited with everything from cotton balls to aluminum foil to nesting material. The choice is somewhat dependent on the foods or materials the rodents are currently eating or utilizing. In the case of rats, bait choice is also somewhat dependent on how much food is thought to be cached or stored for later use. The intent is to provide a bait that is irresistible, or at least higher on the desirability scale than their current food. Today, the industry standard in rodent management, aside from toxicant baits, is peanut butter alone or peanut butter mixed with rolled oats. One common disadvantage of either concoction is the famed rodent dexterity which extends even to their tongues. Both rats and mice are capable of ever-so-carefully removing the last vestige of peanut butter from a trap. Many a well-baited and well-placed trap has been discovered exactly where it was placed, without bait and without the rodent. In some cases, it is possible that ants or other arthropods have removed some bait, but rats and mice are often the sole cause of bait disappearance.

In an effort to prevent this continued thievery, the notion developed of utilizing one of the most highly-favored foods of commensal rodents: *nutmeats*. Paired-up with peanut butter, the combination is devastating. What, however, is to prevent the removal of such enticing items as nutmeats and peanut butter?

THE ENHANCEMENT

The deceptively simple answer, hot glue! This involves physically attaching a nutmeat to the pan of the trap. Hot glue seemed the ideal tool. It's quick to use, dependable, and inexpensive. It's also durable and waterproof. Through trial-and-error, it was determined that the ideal nutmeat is an almond of culinary quality, un-salted and un-smoked. Other nuts can be used depending on availability and the rodent's feeding habits. Additional olfactory enticement can be supplied by the application of a small dab of peanut butter (about the size of a fresh green pea) spread thinly over the nutmeat. Mousetraps require only one-half almond, rat traps a whole almond. To gain a small but crucial amount of leverage, the glue bead and nut should be placed as far forward on the pan as possible. See illustration below.



SNAP TRAP WITH 'ENHANCEMENT'

The "hot-glued-nut method" has been proven virtually 100 percent effective in

over 10 years of professional application. It was devised by considering the problem from the rodent's perspective, an important approach whenever one is working with animals. The rodent discovers a very desirable, high nutrient-density nutmeat together with a 'frosting' of peanut butter. What could be more irresistible to a hungry rodent? Rodents are cautious but the bait's desirability exceeds natural caution. Since the nut is firmly attached to the pan, any attempt to dislodge it results in the trap being tripped. One minor drawback, however, is the natural oiliness of the nutmeat, which sometimes results in detachment when the trap is tripped. Another drawback is, hot glue can be somewhat difficult to remove from the pan and must sometimes be carefully cut off with a pocket knife or single edge razor blade. These are relatively minor inconveniences, especially when faced with rats or mice that have become highly skilled at bait theft.

Use this method along with proper trap placement. Numerous publications, including some in the reference section below, demonstrate proper trap placement inside and outside structures. If this method is utilized outdoors, be sure to shield traps from the view of birds and other vertebrates that might be attracted to nutmeats. A better option, though more labor intensive, is to remove traps during the day and replace them in the evening when rodents are becoming active but most birds are beginning to roost.

The "hot-glued-nut method" may entail a bit more effort on the part of the trapper but it greatly increases the chance of success.

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