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Exploring Our Little Corner of the World with the Galiano Naturalists

by Jeff Salton and Mike Hoebel

Rats! The animal that no one mentions when chatting about their latest wildlife sightings. Yet rats are always around, and they seem to actually want to hang out with us. Here in southwestern BC we have two species of rats, and neither is native to North America. Both the Norway rat (*Rattus norvegicus*) and the black rat (*Rattus rattus*) evolved in Asia but arrived in Europe hundreds of years ago by hitching rides on ships, which is how they made it to North America by the 18th century. They spread across the continent by continuing to hitch rides on wagons, trains, and ships. Norway rats can tolerate the cold better than black rats, but neither is found in interior BC or northern Canada.

The gray-brown Norway rat is the larger and more stoutly built of the two species, and big males may weigh up to a pound. The black rat is smaller and more slender, and its tail is relatively longer. Black rats are better climbers than Norway rats, as attested by one of the species' other names, "roof rat". Both species have an amazing reproductive capacity, and a single female can produce three to five litters per year. Rats are very intelligent, and quickly learn the details of their environment. Their nocturnal feeding habits keep them mostly out of our sight, but their fecal pellets are unmistakable evidence of their presence.

Although they are most often found in close association with human habitations, both species have successfully established feral populations in woodlands and forest edges in southwestern BC. In the wild, they



Black rat (aka 'roof rat', 'ship rat')
Original illustration by Libby McClelland

eat seeds, nuts, fruits, smaller animals, and carrion. There is no evidence that they are a threat to any native species of animals.

Rats have a bad reputation. After all, it was the black rat whose fleas carried the bacteria responsible for the "black death" (bubonic plague) of 14th century Europe. In the interest of balance, it should also be noted that the familiar white lab rat, which has contributed so much to medical research, is just a domesticated variety of Norway rat. Other domesticated varieties make very popular pets. You can even adopt one at your local animal shelter.

This past fall and winter have seen exceptionally high numbers of wild rats on Galiano. The Norway rat is the most common, but we've had sightings of the rarer black rats too. The best way to discourage rats from moving in is to keep the area under your bird feeder clean, and of course never leave garbage about at any time. But if the critters arrive and you suspect where they are hanging out, strew

the area with mothballs...apparently rats hate the smell.

There are other ways of getting rid of rats, some safer than others. Pellet guns and electrified wire are dangerous to you, your kids and pets, and to stray wildlife. And here in the Gulf Islands poison should never be used. Dogs or other small animals may find the tainted bait, but even if the bait is safely hidden, a dead, poisoned rat is a sure-fire way to also kill a bald eagle, red-tailed hawk, raven or mink. (When poisoned, rats crawl away to die somewhere else, carrying the poison with them.)

A big cat will also keep the rats away, but likely will devour birds in great numbers too, so it's counter-productive to get a cat just to keep the rats away, unless you hate birds! In which case a shrink is in order.

The best way to rid yourself of rats is still to trap them. To protect unintended victims (towhees, sparrows, finches in particular), set the trap in an area where birds are unlikely to go, such as a closed-in shed, storage room, or woodpile. And obviously, never put a trap under the bird feeder, or you will catch lots of birds that specialize in eco-friendly cleanup below feeders.

Now that you've found a good place to set the trap, which type is best? The newer plastic traps are easy to set, and unlike the old wood 'n wire spring traps, make disposing of the victims relatively easy.

Old-fashioned traps are still very effective, but using them requires skill in setting the trap, and is messy at the end-game (de-ratting the trap). Peanut butter, well smooched into the trigger mechanism, is still the best bait, and the number #1 choice of "rat professionals" is Adams' natural style - no chemicals! Here are some hints to tip the odds in your favour:

- Screw the trap to the wooden floor of the shed or to a large board. A trap thus

secured is less prone to accidental set-offs by you or the rat.

- Load the trigger mechanism with peanut butter, and set the release bar and the latch verrrrrry carefully, keeping fingers well out of harm's way.
- Now here's the key: spray vegetable cooking oil on the contact between the release bar and the trigger mechanism – that ensures it is ever so sensitive to the touch, and any rat contact (or even heavy breathing!) will set it off for sure!

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Natural Mysteries

Last month's mystery was: Where do seals sleep? Our local harbour seals may sleep on land (basking on rocks and reefs at low tide where they are safe from all predators but man), underwater, or floating just below the surface, hanging vertically with the nose snorkeling above water, the body bobbing like a capped half-empty bottle in the sea. When sleeping underwater, their noses close automatically, and they can stay under for as long as 20-30 minutes before they surface to breathe.

This month's Natural Mystery: Why is it that when some trees die, they will stand for years and yet others rot and fall over quickly?

Have an answer? Send your thoughts to galianonaturalists@gulfislands.com. Have a Natural Mystery of your own? Let us know, and we'll try to answer it.

THE GALIANO NATURALISTS are a group of curious explorers who enjoy observing, marveling, and sharing information about the natural world around us. Come join us. (galianonaturalists@gulfislands.com)

