

Secrets of a Morelling Master

A day afield with Montana's "Mushroom Whisperer"

By Tom Dickson. Photos by Paul Queneau.



“Here’s one,” says Larry Evans, reaching under a fallen tree to harvest his find before bounding higher up the charred mountainside. “Here’s another,” he calls out. On this cloudy mid-June morning, photographer Paul Queneau and I are trying to follow Evans up an impossibly steep south-facing slope of the Swan Range in the Seeley-Swan Valley. Evans scrambles back down the hillside, bent at the waist to see underneath logs or beneath uprooted tree roots where a morel mushroom might hide. “It’s a good idea to look from above and below,” he advises, before bounding back up the slope like a mountain goat. “Remember,” he shouts back at us, “morels like to disguise themselves as pine cones!”

Evans is a morelling master, and keeping up with him—intellectually and physically—is no easy task.

We began our search for the delectable mushrooms along the edge of a 600-acre fire that burned the previous September. The mountainside was black with charred trees, many of them fallen and crisscrossing the forest floor like spilled drinking straws. After driving us to the burn boundary, Evans jumps

out of his vehicle and tests the soil temperature by plunging his finger into the duff. “It’s about 55 degrees here. Perfect.” We follow him through the burned forest and quickly see that the blackened earth has been trampled by previous pickers. “Too easily accessible,” Evans explains. “Anyway, it’s too dry here. We need more soil moisture.”

We drive a half mile to a creek, which Evans says can be a good place to find morels. Creek ravines are humid, contain lots of organic matter, and have a high water table along the banks.

Morels grow where it’s wet.

Evans trots off, checking under toppled trees and other structures that hold moisture in the soil. Downed timber and dense tangles discourage commercial pickers, he tells us. So even if a place has been picked over—signaled by footprints and rings of cut morels—it’s worth pushing through the heavy brush. “For the professionals, it’s all about efficiency,” explains Evans, who picked commercially before becoming a morel broker who buys from pickers and sells to restaurants and gourmet food stores. “They don’t have time to climb over big logs and can’t risk slipping and getting injured.” He looks down



JUST WHERE HE SUSPECTED “I imagine I’m a morel, and then look for places that feel like home,” says mycologist Larry Evans, of Missoula. Prime locales are in forests burned the previous year where red conifer needles litter the floor, indicating a fire that was not too hot. Morels sprout only when soil temperature and moisture are at the right levels, Evans says.



Evans moves through the forest with the speed and grace of a woodland creature. Few people know more about the natural roots, berries, mushrooms, and other natural foods that grow in northwestern Montana forests.

As we search the ground for morels, Evans tells us why he opposes overaggressive logging practices that remove too much of the forest canopy. “The best defense against intense forest fires is shade and soil carbon in the form of wet decomposing logs,” he says. “You’ll still have fires, but they won’t be the catastrophic type we’ve seen in the past decade or so.” He adds that slower-burning fires are good for morel production, which benefits local economies. Roughly \$2 million worth of morels came off the Ninemile Fire site near Missoula in 2001, he estimates. “The Forest Service needs to start managing more for non-timber forest products like mushrooms.”

In deference to his knowledge of all things mycological, and the way he was able

MUSCLING HIS WAY IN Left: Evans often finds morels by bushwhacking through dense tangles of downed timber where commercial pickers rarely venture. Below: The mycologist, made famous by a profile in *Outside*, describes how fire intensity maps can indicate top picking spots. “I go to where the fire started, because that’s where it was likely less intense,” he says.



at the ground. “I’d say there’s already been 20 people through here.”

You’d think a guy who has picked tens of thousands of morels would tire of looking. Not Evans. “I enjoy more than anything what I call the ‘burnacology’ of a fire site,” he says. “I like to figure out why the fire went where it did. And I like going late, in July and August, after everyone has been through. Then you really can get into the big grays.”

Black Belt, Black Dog

Though Montana is home to several renowned mushrooming experts, Evans is the most famous, thanks to an expansive profile in *Outside* that ran in 1998. The 59-year-old mycologist, who has a degree in

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botany from the University of Montana, has hunted for mushrooms throughout the world, from Japan to Bolivia. In addition to brokering edible fungi, he teaches at various ecological institutes and learning centers, consults for natural resource and public health agencies, writes songs, teaches judo, and works occasionally as a chef. For several years he owned and ran the Black Dog Café in Missoula.

Well known throughout Missoula, Evans exhibits a goofy playfulness. He wears sandals and favors T-shirts bearing mushroom illustrations. Two pigtailed of sandy-gray hair swing from under a crocheted cowboy hat as he lopes across the forest floor. “I imagine I’m a morel and then look for a place that feels like home,” he tells us. But behind the free-spirited hippie exterior is a disciplined athlete and forest ecologist. Tall, lean, and muscular,



An Insider’s Guide to Morelling

Morels are among the most sought-after mushrooms in the United States. The edible fungi look like small gray or tan oval sponges fused to a smooth hollow stem. Scientifically, the morel is the aboveground manifestation of an underground network of fungal threads or tissue known as mycelium. Think of the mushroom as the “fruit” and the mycelium as the “roots.” The fruit sprouts out of the earth under certain conditions, usually a mix of warmth and moisture in forests and woods during late spring. Sprouting morels produce spores (think “seeds”) that spread in the wind, germinate, and create new mycelium growth. Finding these delicious (when cooked) mushrooms can be difficult for beginners. Tips from mycologist Larry Evans, of Missoula:

WHERE

In Montana, more morels are found west of the Continental Divide than east of it because the soil is moister and forest fires are more frequent. Morels in central and eastern Montana pop up mainly along river bottoms.

Fire sites: Theories abound, but no one can say for certain why morels sprout the year after a fire moves through a forest. What is known is that most morels found in the West are on burn sites. Find fire dates, sites, and maps from the previous year (or the year before that, but no later) on the U.S. Department of Agriculture’s online Remote Sensing Applications Center or the InciWeb Incident Information System. Fires are far more frequent in some years than others. For instance, not many burned in 2014. Also, even if you find a fire site, it may be miles from the nearest road, so access may be tough or even impossible.

Look for mosaics containing black, brown, and green vegetation. Key in on areas where reddish needles litter the partially burned forest floor.

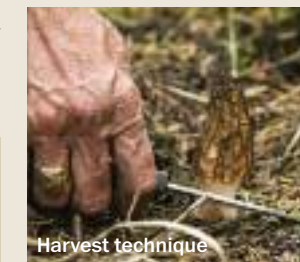
Riparian areas: “Blond” (also known as “river”) morels sprout in dappled light along river bottoms and islands among cottonwood stands, and near ponds and lakes beneath dead or dying alder, ash, and elm trees. Exact sites where river morels grow are tough for beginners to find, so you’ll usually need to befriend someone who is willing to take you to a secret spot where morels sprout year after year. River mushrooms show up in May and early June, when it’s late enough for temperatures to have warmed the soil but not too late that fast-growing vegetation hides the mushrooms from view.

WHEN

Mushrooms start sprouting when soil temperatures reach about 42 degrees. Ideal temperatures are 55 degrees and above. This can be as early as April on south-facing slopes at lower elevations and as late as August on north-facing slopes in subalpine areas. For mid-elevation mountains, the season generally runs from mid-May to mid-June. Early in the season, when conditions are moist, morel pickers want warm days to heat up the soil. Later in the season, when conditions are dry, pickers head out a day or two after a rain.

EQUIPMENT and PERMITS

Most pickers carry a small knife to cut morels off at the base. Any type of carrier bag will do, but a mesh one allows pine needles, insects, and duff to fall through, keeping your bounty cleaner. Also, an instant-read meat thermometer is helpful for testing soil temperature.



Harvest technique

The U.S. Forest Service requires recreational pickers in all national forests to obtain a free personal-use permit. Available at the headquarters offices, permits are usually not transferable to other national forests. In addition, offices are open only on weekdays during business hours, making permits difficult to obtain if you want to collect morels during a weekend. Also, all picked morels must be cut in half—apparently to decrease their value if you try to sell them (a permit for commercial collecting, which has no morel-splitting requirement, costs \$50).

WHILE SEARCHING

Once you’ve located a burn site, focus on the edges of the firescape and other mosaics of black, brown, and green, indicating a slow-moving fire that left a patchwork of both dead and living vegetation. Completely charred “moonscape” areas indicate fires that were too intense for morels to sprout the following year. Key in on burned areas where



Mosaic burn



FUNGI FUN GUY Larry Evans, of Missoula, says being a mushroom expert is no way to get rich. But it does allow him the freedom to teach judo, write music, cook, and, most important, spend time roaming the woods.

to find morels in spots where I'd already looked, I start thinking of Evans as the "Mushroom Whisperer."

We begin to find a few small morels, but the footprints of commercial pickers are everywhere. Evans urges us to follow him upslope another quarter mile, then another quarter mile. "At some point we'll reach the spot where last week's pickers ran into snow that has since melted and receded. We should find some there."

Sure enough, toward the top of the slope the footprints end and we start finding newly sprouted morels. Not the mother lode we've been hoping for, but more than before. And then, just as the picking gets good, the burn peters out and turns into a green hilltop lush with vegetation. "It isn't unusual to have a fire peter out at high elevations, because many happen in September right about when the first high-elevation snows hit," Evans says with a shrug.

Having run out of burn, we head back to the truck. Evans scampers the whole way down the steep mountainside, stopping periodically to peer under fallen trees. In my mind I can hear him whispering to the ground, calling the morels to show themselves.

They didn't today, but the mysterious fungi just might hear him tomorrow. 🐿

For more information on morels, see "On the Trail of the Elusive Morel," March-April 2004, on the Montana Outdoors website: fwp.mt.gov/mtoutdoors/.

Join to get the inside scoop

The Missoula-based Western Montana Mycological Association (WMMA)'s lively Fungal Jungal website (fungaljungal.org), maintained by Evans and fellow mycologist Tim Wheeler, is packed with information on morels and other mushrooms. Flooded by constant requests for free advice on mushrooms and collecting, Evans and Wheeler recently established several levels of WMMA membership that provide increasing amounts of information on finding morels and other mushrooms for increased fees. For instance, anyone can look at the website and find basic information. But a \$150 annual membership provides access to WMMA's morel hunter chat line, where experts discuss current morelling activity, as well as three "morelling alert" e-mails or phone calls during the height of the season with tips on exactly where to go.

"Tim and I volunteer our time to the WMMA to help people appreciate this remarkable resource," Evans says. "We feel it's important to protect the public's health by providing mushroom identification, and we provide that service for free. But it's expensive to maintain our website, so we depend on the generosity of our members—especially those who attend WMMA events like the Memorial Day Morel Foray. We've never been skunked in 24 years. Tim and I know how to find morels, and the foray is a great place to learn from us." ■



reddish conifer needles litter the partially burned forest floor. This indicates that the fire was not too hot to burn needles off the higher branches but still hot enough to kill the tree, creating ideal conditions for morel growth the following spring and summer.

Seek out areas where moisture collects or creates damp conditions, such as along seeps and springs, next to creeks, on benches, under downed trees, at the base of standing and uprooted trees, and in depressions. If your shoes are getting damp, morels may be nearby.

Look for the mycelium—resembling white spider webs or strands of ash—that occasionally rise to the surface under downed trees. Morels may be sprouting nearby. The presence of fairy cups, another type of mushroom, is a good sign and indicates that conditions are ripe for morels.



Mycelium strands

Morel stumps, or rings, indicate previous pickers. If the cuts look old, search nearby for new morels that may have sprouted since, especially if rain fell during the previous few days. If the cuts are new, the general area is good for morels and may hold some in out-of-the-way spots like behind the branches of large downed trees.

IF YOU FIND ONE

Crouch down, cut it off at the base, then slowly look for other morels growing nearby. Set your bag down and walk around, bent at the waist, looking at the site from different angles. Continue searching while moving laterally along the mountainside, maintaining the same elevation.

Once you stop finding new morels, look for areas that contain the same soil and moisture characteristics as where you were finding them before.

IF YOU DON'T

If morels aren't sprouting where you think they should be (a fire site from the previous year, in May through early July, during moist and warm conditions), change to a different elevation (go down in April through May or up in June) or mountain "aspect" (the direction the hillside is facing) until you find

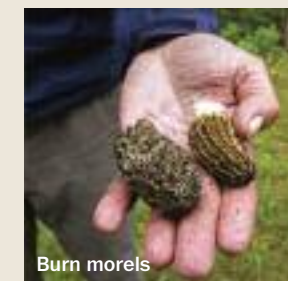


Cut morel stump

the right conditions of soil temperature, burn mosaic, and moisture.

TYPES OF MORELS

Mushroom experts group morels in three categories: 1) "burn," or "fire," morels (of which there are two main types: the smaller "black," which sprouts mainly before mid-June, and the larger "gray," which sprouts mainly



Burn morels

after mid-June), found at fire sites; 2) "river," or "blond," morels, found in riparian areas; and 3) "natural" morels, found on lawns, in parks, or in any other areas that aren't streamside or on fire sites.

HEALTH HAZARDS

When thoroughly cooked, morels are safe to consume for most people. However, some people are allergic, so if you've never eaten one, consider



A hollow true morel

trying a small cooked sample first to test for a reaction. Avoid picking old, dried-out morels. They taste terrible and can cause stomachaches. Never eat the three inedible morel lookalikes. The snowbank false morel and beefsteak morel look like brain lobes and are reddish or orangish. If unsure, cut the mushroom in half. "If not hollow, don't swallow," is one rule of thumb. The dangerous early false morel has a head that hangs over the stem, like a skirt or umbrella, while the head of a true morel

merges smoothly with the stem. Regarding the head and the stem: "If not attached, throw in the trash."

ASKING AND PICKING ETIQUETTE

Don't be surprised or insulted if a morel picker you know is reluctant to tell you exactly where and when to go. It can take pickers years of exploring to find productive sites, so it's not fair to expect them to divulge hotspots to just anyone.

When picking, try to give others in the area plenty of room by staying out of sight. Watch what direction others are moving and try not to jump ahead. At the same time, keep in mind that national forests are public lands, and no one can "claim" a morelling site.

If you run into others in the woods, don't be shy about asking for information about where they are finding morels, such as the elevation, ground types, and slope aspect. Mushroom pickers can be secretive, but most are willing to share at least a little information with beginners. ■



A good start