

How to find, harvest, and safely cook Montana's most delectable mushroom

# In the trail of the elusive morel

By Ellen Horowitz

PHOTO BY DRAKE BARTON



THEY HIDE UNDER LEAVES, POKE through thatch, bulge under forest duff, ease up from moss, and arise out of scorched earth. You can be close and never see them. Then, one day, you finally stumble upon springtime's most prized and delicious mushroom. That unique shape and texture now seems unmistakable. You look and see another, then another. The morel hunt is on.

Morels are a common mushroom found in spring and early summer throughout the United States. So prized are the fungi for their nutty taste when sautéed that they sell for up to \$7 per pound fresh and up to \$150 per pound dried. As a result, mushroomers are often as secretive about their "shroomin' spots" as anglers

**FUNGI FORTUNE** Valued for their delectable taste, morels are sought both for personal use and as a marketable commodity that fetches top dollar in gourmet stores.

are about hiding a favorite fishing hole. But anyone can find morels if they know the basics of when and where to locate the mushrooms, how to avoid dangerous look-alikes, and how to prepare them properly.

Morels first appear in spring as the weather warms. According to mycologists (mushroom experts), the magic minimum soil temperature required for morel fruiting is 42.5 degrees. Rather than place thermometers into soil, however, most morel hunters rely on signs of spring to let them know when the fabulous fungi are

popping up. Drake Barton of Clancy says he associates the blooming of calypso orchids around late April and early May with morel season in his neck of the woods. In other parts of western Montana, the time to search is when trilliums, Oregon grapes, or strawberries begin blooming. One Swan Valley resident begins looking in earnest when skunk cabbages flower in April. Some consider the drumming of ruffed grouse or the sweet perfume of cottonwoods as indicators of morel season. And others go out in May and early June whenever rain is followed by two or three warm, sunny days.

The morelling season moves from low elevations to high ones. Montana's first morels show up in river valleys, sometimes as early as mid-April, and the season can last well into summer in the mountains. For medium elevations, the peak of the season ranges from about mid-May to mid-June.

"If a person had to pick a calendar



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date for when morels will be out around here,” says Dale Johnson of Whitefish, “Mother’s Day is a pretty safe bet.”

**A**lthough Johnson and other serious morel hunters will tell you when to go, they grow more reticent when asked where exactly to find morels. Johnson, who has collected edible mushrooms for 15 years, says it took him 5 years of walking and hard looking before he found a productive morel patch. The whereabouts of that mother lode, he says, shall remain secret.

But it’s no secret that morels are typically found in woods and forests. Cottonwood bottoms along large rivers are favorite haunts for many early-season hunters. Aspen groves and older coniferous forests—ponderosa pine, Douglas fir, grand fir, and spruce-subalpine—all provide potential morel hunting grounds, though rarely above treeline.

Larry Evans, founder of the Western Montana Mycological Association, shies away from speculating on the best forest types for morelling.

“Anytime you make generalizations about where morels should be, one shows up where you don’t expected it,” he says.

Though forests are probably the best place to find morels, they aren’t the only locales where the mushrooms pop up. Evans has picked them on lawns and along garden paths and says the mushrooms can also appear in landscaping bark and old orchards.

Even though morels can be found “almost anywhere,” as Evans puts it, some places are better than others. For example, morels are often found near dead trees. That’s why, long before the last embers of a forest fire are snuffed out by autumn rain and snow, serious morel hunters study maps and make plans for the coming mushroom season.

With the first warm days of May, trucks and cars begin lining roadsides next to burned areas. These are spots a beginner should keep an eye on.

“The commercial pickers are tuned into the big fires and the places that have the best chances of producing abundant morels,” says Rod Hickle, an official with

the Flathead National Forest.

Hickle oversaw mushroom harvesting and permit enforcement following the 2001 Moose Fire. He says the first few weeks at a prime fire site can be chaotic, as commercial harvesters scramble to find productive morel patches. “We had people trampling over each other to reach the best places,” Hickle says.

After two or three weeks, the mob scene abates and amateurs and their families can safely venture into the woods. You might not gather as many morels as earlier, Hickle says, but there will still be plenty, and the picking can last into early August if conditions stay moist.

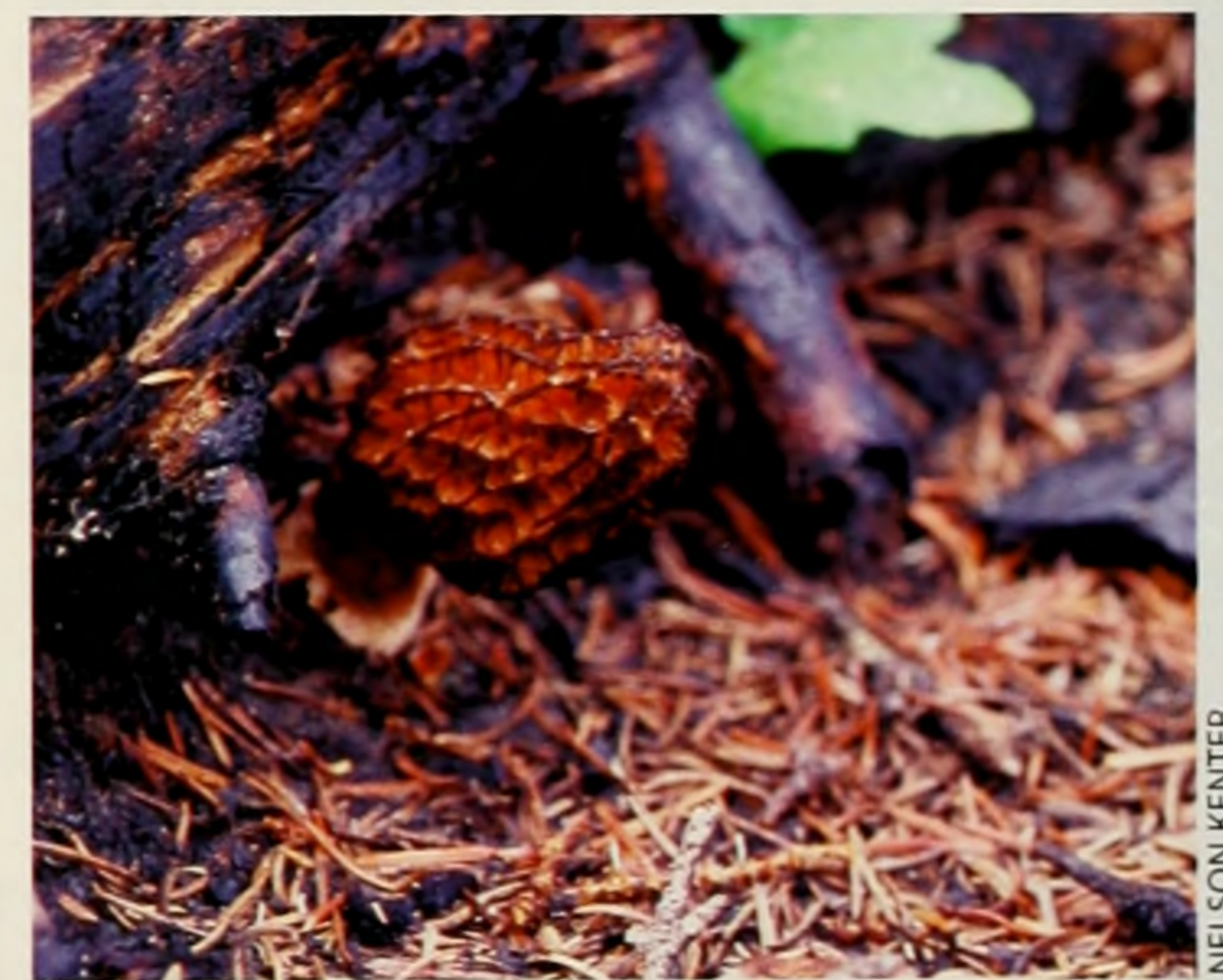
**P**art of the mystery behind morels, like many mushrooms, is their ability to pop up overnight. The “mushroom” is the reproductive or fruiting part of the fungus. Its purpose is to produce spores, the mushroom’s equivalent of seeds. Most of the morel’s life is spent underground, where it thrives as a mat of hair-like fibers called a mycelium. A tiny knot of thick-walled cells forms on the mycelium. The knot, or sclerotia, can either grow into a new mycelium or fruit into a mushroom.

Scientists don’t know the exact conditions that force the fruiting body to grow, says Dr. Cathy Cripps, a mycologist at Montana State University. If the sclerotia “decides” to produce a mushroom, it takes about seven to ten days for the primordial—the infant mushroom—to form. The mushroom matures and produces spores

**LET THE HUNT BEGIN** Though morels can grow nearly anywhere, seasoned hunters focus their attention on woods and forests disturbed by nature or human development. The hands-down favorite hotspot is a forest the spring after a fire. Hunters scour the blackened forest floor for black morels (below center), which poke up here and there from beneath the charred duff. It’s best to wait for warm days following wet ones when trilliums, skunk cabbages, or calypso orchids (bottom) bloom.



CHUCK HANEY



NELSON KENTER



DRAKE BARTON

about two weeks later.

Theories abound when it comes to explaining why morels fruit, or push up from underground. Some researchers believe that morels produce fruiting bodies when the mycelium runs out of nutrients to feed on.

Another theory suggests that the mycelium, spreading underground, fruits when it reaches an impenetrable barrier such as a road or path.

“The soil compaction makes a wall that the mycelium can’t physically get through,” says Evans. “So it throws up a fruiting body and ‘jumps’ across the barrier with spores. Blooming is an immediate response to losing its life.”

Consider fruiting as the mushroom’s mad dash to reproduce, one last attempt to ensure its long-term survival.

The stem’s role in the process is primarily to lift the cap high enough for winds to carry the microscopic spores. On the typical grocery store button mushroom, spores are released from gills beneath the cap. On morels, the entire cap is the spore-bearing surface. Each pit and ridge in the morel’s honeycombed cap increases the surface area and therefore the number of spores released. A single morel produces millions of spores, which is necessary because relatively few ever germinate.

No one knows for sure why morels often bloom so profusely in burns. According to Cripps, morel fruiting after fires is not ran-

dom, but scientists simply “don’t know enough about the ecology to make predictions,” she says. “But we can say that, given enough moisture, morels will come up.”

**S**o you’ve spotted a morel. Now what? Evans recommends cutting the stem just above ground level with a knife or pinching it off with your fingers. If you pull the entire morel mushroom up, cut off the base to get rid of attached dirt.

Once you get home and are confident that you have morels and not look-alikes (see below), place them in a bowl of lightly salted water for a few minutes to draw out any bugs that might be living inside. Then rinse in fresh water to clean out dirt caught in the crevices and dry thoroughly on a towel. The easiest, and many would argue best way to prepare morels is to slice them in half lengthwise and sauté in butter. The morels will flatten out as they heat up. Eat as is, heap on venison steaks, or use in other recipes. The mushrooms have a nutty flavor and make a great stock for soups. They can also be dried or frozen (cooked or partially cooked) for later use.

Morels are delicious delicacies, but you need to take a few precautions to prevent sickness. Cripps recommends smelling each morel you pick. If it has an off odor, don’t keep it. Also, avoid picking morels growing in areas that have been sprayed with chemi-

cals. Mushrooms act like sponges and soak up the toxins.

As is the case with other wild mushrooms, morels should be well cooked. Allergies are another concern. If you are trying morels for the first time, sample just a few to see if you have an allergic reaction such as an upset stomach. Some people also experience problems when combining morels and alcohol, so Cripps advises caution the first time consuming the two together. Eating old morels can also cause a stomachache. Cripps says some people get so excited about collecting morels that they sometimes gather and eat old ones. “It’s like eating old, rotten fruit or vegetables,” she says. Old morels appear shriveled and have hard, crusty edges.

True morels belong to the genus *Morchella*. Mycologists don’t know how many actual species of morels exist, but western morel hunters generally lump them into two types: yellow and black. The caps of true morels can vary in shape and size. Two key identifying features distinguish them from false morels: The lower edge of the cap is fused to the stalk, and true morel caps and stems are hollow when sliced lengthwise.

“If you find lots of ‘morels’ near melting snow, they’re usually not true morels,” warns Evans. Sometimes called the snowbank false morel, the *Gyromitra gigas* is not recommended food. It contains traces of MMH, monomethylhydrazine, a self-

## Beware the inedible mushroom

Real morels, which come in yellow and black varieties, are perfectly safe to consume when harvested fresh and cooked thoroughly. But don’t pick or eat the inedible morel look-alikes, such as the snowbank false morel or misleadingly named beefsteak morel. And be especially careful of the early false morel. The head of a true morel merges smoothly to the stem, while the head of the similar-looking early false morel hangs over the stem, unattached, like a skirt.



MICHAEL & PATSY FRIBLEY

**Yellow Morel**  
*Morchella esculenta*



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**Black Morel**  
*Morchella angusticeps*



DRAKE BARTON

**Snowbank False Morel**  
*Gyromitra gigas*



HIROSHI TAKAHASHI

**Beefsteak Morel**  
*Gyromitra esculenta*



HIROSHI TAKAHASHI

**Early False Morel**  
*Verpa bohemica*



RON BOGGS

**THE MOREL OF THE STORY** Experienced mushroom hunters know to carry a bag whenever entering springtime forests, especially ones burned the previous year. Because you never know.

oxidizing chemical used in rocket fuel.

Another morel look-alike, *Gyromitra esculenta*, grows in the same environments as true morels. The common name of this mushroom, the beefsteak morel, gives the wrong impression that it is edible. It too contains MMH and should be avoided. Like the snowbank false morel, its head is usually reddish brown in color and looks like a brain lobe. When sliced in half lengthwise, the stem and cap are not in one piece, as with true morels. Instead, the brainlike cap cascades over the stem.

Another phony morel, called *Verpa bohemica* or early false morel, can grow next to true morels in cottonwood bottoms.

“They look a lot like true morels,” says Cripps, “but the cap on *Verpa* overhangs the stem, like a skirt. And the cap may have a ruffled appearance.” Although *Verpa* is not considered toxic, “serve it to 25 people and someone is likely to come down with a stomachache,” she says. It can also cause muscle spasms in some people.

Though you can strike out on your own with no more advice than what’s contained in this article, Cripps suggests that beginner mushroom hunters accompany someone

who knows morels. “Join a mushroom club,” she advises.

Both the Western Montana Mycological Association (check out their entertaining website at [fungaljungal.org](http://fungaljungal.org)) and the Southwest Montana Mycological Association (also known as the Bozeman Mushroom Club) offer springtime mushroom forays as a way to introduce beginners to wild fungi.

If you want to try morelling solo, bring along a field guide, learn to identify the look-alikes, and, if possible, have someone who knows morels confirm the species before you begin heating up the butter.

Evans describes morel hunting as an “optical challenge.” Even if a person knows what they look like, he explains, it takes practice to spot them against a camouflaged background of leaves and sticks.

Once you see one, however, you’ll never forget it, says R.J. Devitt, director of the Glacier Institute’s Big Creek Outdoor Education Center. Devitt, his wife, and their daughter live in a small cabin near the site of the 2001 Moose Fire. The following spring, morel hunting became an evening outing for the family.

“They were everywhere,” he says. “I’d find one and tell my two-year-old daughter, ‘It looks like this.’ She easily learned to rec-

## If you go

**When:** Anytime from late April to mid-summer, depending on the altitude and climate. Prime morelling conditions are when a few warm days follow a few days of rain.

**Where:** Woods and forests of all types, especially after fires. Contact national forest offices to find maps of fire areas or locations of prescribed burns.

**Regulations and licensing:** Licenses are not needed for private land collecting, though trespass laws do apply. On public land, commercial harvesters need a permit. Personal-use mushroom hunters on state lands need a State Recreational Use License. Requirements vary on national lands, so call ahead for details before you start harvesting.

**Equipment:** Field guide (or this article), a knife to cut stems, and a porous collecting bag, basket, or bucket that allows spores to disperse and prevents mold from forming due to excess moisture.



MICHAEL S. QUINTON

ognize morels and soon began helping us with the harvest.”

Morelling is particularly fun with kids. They love to be out in the woods, and the search for “treasure” keeps them engaged for hours. Brenda Kraft of Polson searches for morels several times each week during the height of the season. She grew up hunting mushrooms and today carries on the tradition with her own children, first as toddlers, and now as teenagers.

“It’s a family thing,” she says. “It’s fun and inexpensive entertainment.” 🐿️

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