The Bureau of Land Management issued interim guidance allowing state directors to decide whether to close caves to slow the spread of a deadly fungus that has attacked bats. Visitors to Fort Stanton Cave, New Mexico’s third-longest, must obtain a permit from BLM’s office in Roswell. Photo courtesy of BLM.

The fungus, which has caused mortality rates of between 80 and 100 percent in six bat species, including the federally endangered Indiana bat, was discovered in a bat in western Oklahoma last spring. The carrier bat, known as cave myotis, is typically found only north and west of Texas and south of the border, lending urgency to the Forest Service closures.

While the fungus is believed to spread mostly from bat-to-bat and bat-to-cave contact, biologists believe cavers may also be carrying fungus spores on their clothing and equipment. Outbreaks of the disease have been found to “leapfrog” to colonies at greater distances than most bats typically fly.

Scientists do not yet know how the fungus made it to Oklahoma.

Pre-emptive strike

On the front lines of the disease’s spread are BLM lands in Colorado, New Mexico and Wyoming, where agency officials have been already been holding several stakeholder meetings to determine what caves potentially warrant closures and further monitoring. The three state offices plan to each announce cave and abandoned mine management plans within the next few weeks.

While none of the offices have suggested blanket cave closures, some cavers fear the agency will fall in step with the Forest Service and close all caverns in Colorado and Wyoming to consolidate federal actions in those states.
In New Mexico, biologists have expressed concern about how migratory species such as the Mexican free-tailed bat will respond to the fungus.

The species, which migrates thousands of miles from southern Mexico to much of western North America including New Mexico's Carlsbad Caverns, could accelerate the disease's spread across international borders, said Mylea Bayless, white-nose syndrome response coordinator for Bat Conservation International based in Austin, Texas.

"They may not fall victim to the disease, but they could simply vector the fungus elsewhere," she said.

But other groups, including the caving community, have implored federal and state agencies to forego what they view as extreme measures based on speculation about how the disease is spread.

The National Speleological Society, in a letter late last month to Regional Forester Rick Cables, blasted the agency's “gross over-reaction” to the white-nose syndrome threat in the area.

“I certainly hope BLM doesn't follow suit,” said Dave Lambert, chairman of the Colorado Cave Survey based in Denver.

“A blanket-wide cave closure is not the best policy,” he said, adding that some caves that have been closed in the East have experienced vandalism in the absence of visitors. "It's not in the best interest of caves, the caving community or the bats.”

Dennis Saville, wildlife program lead at BLM Wyoming in Cheyenne, said the Forest Service's closure decision pushed his agency to accelerate management decisions for caves and abandoned mines in the state, but that he did not anticipate a complete ban on caving.

“We felt all along that we didn’t need to go to that extreme,” he said.

The agency administers about 40 caves in the state, but only half of those see substantial recreational use, Saville said. Decontamination procedures -- in which caving equipment and clothing is washed with Lysol or similar solutions upon exiting a cave -- may suffice at most caves, Saville said.

Colorado BLM oversees about 3,200 abandoned mine sites and at least 20 caves that could support bat colonies, said state spokesman Steven Hall.

But with 8.4 million acres under its jurisdiction, one challenge is identifying where the state's caves are, he said. The agency would also be hard-pressed to enforce closures at caves that have no gates.

“That's why it's important to work with folks who know where those caves are,” he said.

**Interagency coordination**

BLM officials in New Mexico are hoping strike a landscape-wide approach by coordinating an interagency plan with the National Park Service, Fish and Wildlife Service, Forest Service and the New Mexico Department of Fish and Game, said state BLM spokeswoman Donna Hummel.

“If BLM decided to close all of its caves to recreation cavers, they would start knocking on the doors of NPS and the Forest Service,” Hummel said, echoing a concern expressed by BLM officials in Wyoming and Colorado.

New Mexico is home to 16 of the 25 hibernating bat species in the United States, including myotis velifer, the infected brown bat in western Oklahoma, Hummel said.

While concerns remain over what impact the fungus could have on Western bats, hibernating colonies in the region typically contain far fewer of the animals than colonies in the East, which can include hundreds to hundreds of thousands of bats of several species. Caves and abandoned mines in New Mexico and Wyoming, by contrast, usually do not grow to larger than a hundred of the animals.

Many also question whether western caves -- many of which are drier and warmer than Eastern caves -- contain adequate climates to facilitate the disease's spread.

“We really don't know how our bats are going to be affected by this syndrome, if at all,” Hummel said.

**Better safe than sorry**

The BLM guidance comes only weeks before FWS is expected to make public a draft white-nose syndrome national response plan, which while unlikely to include mandatory closures, will include specific recommendations on how government agencies should prepare for and respond to the disease.

In the meantime, allowing BLM state directors to decide when targeted closures are necessary is an approach bat advocates can live with, said Bayless of Bat Conservation International.

“It's one of the only tools that we have as we continue to try to isolate the risk factor,” she said.

While not saying whether she favored BLM's management response to the Forest Service's closure policy, Bayless said it is important for federal lands agencies to adopt a consistent response.

Others saw the BLM decision as a missed opportunity to aggressively target a disease that has shown to be spreading 500 miles each winter.

“Western land managers are finally waking up to the overwhelming threat of white-nose syndrome to bats, but this devastating disease simply will not allow the luxury of half-measures,” said Mollie Matteson, conservation advocate with the Center for Biological Diversity. “If the BLM is serious about protecting bats, then it needs to restrict access in all caves with bats.”

The group earlier this year petitioned the federal government to administratively close all bat caves on federal lands in the lower 48 states.

“Here in the Northeast, most of our bats are gone,” said Matteson, who is based in Vermont. "If Westerners don't want their bats to meet the same fate, they need to act fast ... Stopping human transmission is one big step toward doing that.”