

**ORDER OF THE REGIONAL FORESTER
CLOSING AN AREA TO ENTRY, TO WIT:**

**Emergency Closure
All Caves and Abandoned Mines on National Forest System Lands
in the Rocky Mountain Region**

Pursuant to 16 U.S.C. § 551 and 36 C.F.R. 251.50(a), the following acts and omissions are prohibited on all National Forest System lands, administered by the Rocky Mountain Region in the states of Colorado, Kansas, Nebraska, South Dakota and Wyoming.

1. Entering any cave or abandoned mine except those areas listed in Exhibit A. 36 C.F.R. § 261.53 (a), (b) and (d).
2. Going into any cave on National Forest System lands listed in Exhibit A or pursuant to the exemptions listed below, without decontamination prior to entry to, and departure from, said cave or abandoned mine consistent with those guidelines hereby attached and incorporated into this Order as Exhibit B.

For purposes of this Order "abandoned mines" are defined as those inactive mine openings and adits that are not situated on an unpatented claim under the 1872 Mining Law, and which are situated on National Forest System lands.

These restrictions are necessary to protect bat species from White-nose Syndrome. They are in addition to the general prohibitions set forth in 36 CFR Part 261. This emergency closure will be effective for one year, from July 26, 2010 through July 25, 2011, unless terminated earlier by the Regional Forester.

Pursuant to 36 C.F.R. § 261.50 (e), the following persons are exempt from this order:

1. Persons entering those caves listed on Exhibit A, which is attached and hereby incorporated into this Order.
2. Persons with a Forest Service permit, defined as an authorization from a Forest Officer by 36 C.F.R. § 261.2, specifically authorizing an otherwise prohibited act or omission, which permit will be consistent with Exhibit B.
3. Any Federal, State or local officer, or any member of an organized rescue or firefighting force working in the performance of an official duty.
4. Persons operating under the 1872 Mining Law are exempt from Prohibition 1.

Violation of these prohibitions set forth above is punishable by a fine of not more than \$5,000 for an individual and \$10,000 for an organization, or imprisonment for not more than six (6) months, or both. (16 U.S.C. § 551, 18 U.S.C. §§ 3559 and 3571).

Dated this 26th day of July, 2010, at Golden, Colorado.



RICK D. CABLES
Regional Forester
Rocky Mountain Region, USDA Forest Service

EXHIBIT A

LIST OF AREAS NOT SUBJECT TO EMERGENCY CLOSURE

The following area is exempt from the prohibition on entry but is subject to the decontamination procedures as shown in Exhibit B.

1. Wonderland Cave, Black Hills National Forest
Legal description: Section 27 of Township 4 North, Range 5 East, Meade County, South Dakota

EXHIBIT B

Decontamination Procedures for National Forest Service Lands To Help Prevent the Spread of White-Nose Syndrome (WNS) Associated with Cave and Abandoned Mine Entry

USDA Forest Service
Rocky Mountain Region

July 2010

White-Nose Syndrome (WNS) has been documented across the eastern United States and Canada and most recently in Missouri and Oklahoma. The U.S. Fish and Wildlife Service recommends that recreational caving should not occur in WNS affected and adjacent areas in order to reduce the risk of human transmission of the fungus *Geomyces destructans* into new areas until WNS is better understood.

The Rocky Mountain Region is restricting access to caves and abandoned mines under its jurisdiction. A "cave" includes all caves and fissures whether they are known to be used by bats or not. A cave is defined under the Federal Cave Resource Protection Act as "any naturally occurring void, cavity, recess, or system interconnected passages beneath the surface of the earth or within a cliff or ledge that is large enough for a person to enter, whether the entrance is excavated or naturally formed." "Abandoned mines" include inactive open adits, tunnels, and shafts, but do not include active mines where ongoing mining activities are being conducted. If entry into these caves and/or abandoned mines is necessary, take the following precautions to prevent the possible spread of the fungus *Geomyces destructans*.

You should not handle bats unless specifically authorized to do so. However, if you should observe live or dead bats that may be exhibiting characteristic signs of WNS, report this immediately to the nearest Forest Service office (<http://www.fs.fed.us/r2/contact/>), state wildlife agency (<http://www.fws.gov/offices/statelinks.html>), or U.S. Fish and Wildlife Service Ecological Services Field Office (<http://www.fws.gov/offices/>). Visit <http://www.fws.gov/whitenosesyndrome.html> for the most current information about the spread of this disease.

General Guidelines to Prevent the Spread of WNS

- Avoid entry into all caves and abandoned mines, and observe closures and advisories.
- **Do not use gear that was used in a WNS-affected state outside that affected state.**
- **Decontaminate previously used gear** immediately, store gear away, and thoroughly wash and decontaminate any surfaces with which these items may have come into contact (e.g., car trunk, duffle bag, etc.).

Caves. Avoid cave entry if possible. Clothing (including outerwear), boots, socks, harness/ropes, helmet, hardhat, fannypack/daypack, headlamp, flashlight, camera, and other gear should not be used in multiple entries in the same day unless the cleaning and decontamination described below can be performed between each entry. In situations where caves are known to be interconnected and have multiple entrances, decontamination is not required between entry at the various entrances, within the same day.

Abandoned Mines. For the purposes of this discussion a "site" may consist of one or more related underground mine openings and may be as large as several square miles. Under situations where surveys

are being conducted in association with abandoned mine closures for human safety, and multiple sites are being visited in a single day in states currently undocumented as affected by WNS, containment and decontamination between each site may be impractical. Specifically for abandoned mine entry associated with human-safety closures we recommend the following:

- Avoid entry if possible. Limit entry to that necessary to safely perform required work. For construction this is typically less than 50 feet inside the adit or shaft.
- Follow the decontamination and containment protocol between sites if feasible. If decontamination is not feasible between sites, identify feasible opportunities for decontamination at the smallest possible geographic unit to minimize risk of contamination between locations. These geographic units could be hydrologic unit code boundaries (HUCs) or bat habitat use areas.
- Decontamination must occur no less frequently than at the end of each day.
- Protect the interior of vehicles with tarps, sheets, etc. if driving between sites without decontaminating clothing and gear.

Containment and Decontamination Procedures for Abandoned Mines and Caves:

- Entry will only occur with clothing (including outer clothing), boots, socks, harness/ropes, helmet, hardhat, fannypack/daypack, headlamp, flashlight, camera and other gear that have been **fully cleaned following the protocol below and rinsed prior to entry** to remove residue of chemical product used.
- **Minimize gear** taken in to a site.
- If possible, do not bring electronic equipment underground. If practical, **cameras** and other similar equipment that must be used may be placed in plastic casing (i.e. underwater camera housing) or wrapped in plastic wrap where only the lens is left unwrapped to allow for photos to be taken. The plastic wrap or the equipment can then be decontaminated after use.
- **Air monitors** are required safety equipment for underground abandoned mine entry. The manufacturer of your air monitor (**ESPECIALLY THE SENSORS**) must be consulted with prior to applying any decontaminant chemicals, to ensure that the sensors and electronic components are not compromised in any way. Follow the manufacturer's recommended procedures.
- **Tyvek® or other disposable outerwear, rubber boot covers, and latex rubber gloves** may be used for each entry in lieu of decontamination procedures for clothing.
- **Companion animals** should be kept out of caves and mines as fungal spores could adhere to fur and be transferred to another cave.

Step #1 upon exiting a cave or abandoned mine:

- Thoroughly scrape or brush off any dirt and mud from clothing, boots, and gear and then place them in a sealed plastic bag or plastic container with lid to be cleaned and disinfected off site.
- Outer clothing should be removed prior to entering a vehicle and after/between a site visit. A clean change of clothing is recommended.
- Surface cleaning of exposed skin with antibacterial hand sanitizer should be done prior to entering the vehicle's cab.
- Place disposable items (e.g., Tyvek® outerwear, rubber boot covers, latex gloves) in sealable containers, to be appropriately decontaminated and disposed of off-site.

Step #2 after exiting a cave or abandoned mine:

- **For clothing and submersible (i.e., soft-sided) gear:** Wash all clothing and any appropriate equipment in washing machine or by hand using conventional detergents. Washing can be done in cold, warm or hot water. Laboratory testing has found Woolite® fabric wash to be the best detergent for this procedure. Rinse thoroughly, and then follow by soaking for a minimum of 10 minutes in one of the recommended decontaminating products listed below, then rinse and air dry. Boiling items for 15 minutes can be done in lieu of chemical treatment.

- **For non-submersible gear** (i.e., equipment that will be damaged by submersion): Clean thoroughly with soap and water (or use Lysol[®] Disinfecting Wipes), then decontaminate by applying one of the recommended chemical products listed below to the outside surface for a minimum of 10 minutes, then rinse and air dry. This may include flashlights, headlamps (elastic straps can be removed and washed as a submersible item), and helmets.
- **Footwear:** Where possible, rubber (wellington-type) boots (which withstand harsh decontaminating products and are easily cleaned) are recommended. Boots need to be fully scrubbed and rinsed so that all soil and organic material are removed. The entire rubber and leather boots, including soles and leather uppers, can then be decontaminated with an appropriate chemical product listed below for a minimum of 10 minutes, then rinse and air dry. Boiling items for 15 minutes can be done in lieu of chemical treatment.
- **Ropes and Harnesses:** It is the responsibility of each individual relying on life-support equipment, such as harnesses and ropes, to ensure that the decontamination protocols in use are chemically compatible with this equipment. In cases where safety following decontamination has not yet been evaluated, then ropes and webbing should be dedicated to one cave or not used at all to prevent the spread of WNS. **To date, only Sterling rope and webbing have been shown not to be damaged by the following decontamination protocol:** Wash rope/webbing in a front loading washing machine on the gentle cycle using Woolite[®] Extra Delicates detergent. Treat by immersion in a 1:128 dilution of Lysol IC Quaternary Disinfectant Cleaner for 15 minutes. Rinse in fresh, clean water for a minimum of two rinses and allow to air dry. Other products have yet to be tested for integrity after decontamination.
- **Cameras and Electronic Equipment:** If practical, cameras and other similar equipment that must be used may be placed in plastic casing (i.e. underwater camera housing) or wrapped in plastic wrap where only the lens is left unwrapped to allow for photos to be taken. The plastic wrap can then be decontaminated by using Lysol[®] Disinfecting Wipes and discarded after use. If using plastic wrap is not practical, Lysol[®] Disinfecting Wipes can be applied directly on camera surfaces or plastic casing.
- **Vehicles:** Vehicles used to transport equipment may harbor spores. Always remove and contain clothing and gear away from your vehicle in sealed plastic bags and storage containers with lids and wipe them with wipes prior to placing them in your vehicle. Dispose or decontaminate bags and storage containers along with your gear using one of the chemical products listed below.
- Showering or bathing is required following cave or abandoned mine visits.

Recommended Decontamination Products. The following chemical products were tested in a laboratory setting and were found to be particularly effective against killing the more resistant, spore-form of *Geomyces destructans*, as well as the hyphae:

1. Lysol[®] IC Quaternary Disinfectant Cleaner (with a minimum of 0.3% quaternary ammonium compound) - this is a concentrate which requires a 1:128 dilution (1 part concentrate to 128 parts water or 1 ounce of concentrate per gallon of water)
2. Lysol[®] All-purpose Professional Cleaner
3. Formula 409[®] Antibacterial All-Purpose Cleaner (with a minimum of 0.3% quaternary ammonium compound)
4. A 10% solution of household bleach - this must be made by measuring 1 part bleach to 9 parts water (an estimate of 1:9 is insufficient)
5. Lysol[®] Disinfecting Wipes
6. Boiling water

Quaternary ammonium products such as 409 and Lysol cleaner must be properly disposed into a municipal water system (poured down a drain or toilet) or similar system to receive required treatment. It is illegal to dump these products on the ground. Follow the label instructions and do not

wipe these products directly on your skin or surfaces that come in contact with humans, pets, bats, or other wildlife.

If using bleach solution, do not store dilution for more than 24 hours as the bleach will begin to break down once it is diluted. Store in opaque bottles as bleach also breaks down when exposed to sunlight.

Product guidelines should be consulted for compatibility before using any decontamination product listed under Section 3 on specific equipment. **Also, detergents and quaternary ammonium compounds (i.e. Lysol® IC Quaternary Disinfectant Cleaner) should not be mixed directly with bleach as this will inactivate the bleach and in some cases produce a toxic chlorine gas.**

Show caves and tourist mines. Provide education to visitors on caves, bats, and WNS such as is being conducted at Mammoth Cave (<http://www.nps.gov/macaca/whitenose.htm>).

Work with contractors, special use permittees, and concessionaires to enlist a decontamination process for all individuals entering show caves or tourist mines by implementing a combination of the following actions that best fits the situation and will be most effective:

- Closing these sites to entry for anything other than WNS surveillance during hibernation season (roughly from October 1 – May 1).
- Forbidding entry with footwear that has previously been in a cave or mine **OR** require footwear decontamination prior to entry at a provided/supervised decontamination station, **OR** sell disposable rubber booties to be worn in place of footwear.
- Forbid entry with clothing that has previously been in a cave or mine **OR** provide disposable Tyvek suits for sale.
- Forbid carrying accessory items such as water bottles, cameras, cell phones, daypacks in to caves or mines that have previously been in a cave or mine, unless decontaminated on site.
- Provide a decontamination station and personnel to run it.
- Restrict human entry in to portions of caves or mines used by bats any time of year.
- Restrict human traffic to well-defined contained pathways that avoid opportunities for human contact with cave features other than the pathway.

As new information becomes available, these decontamination procedures will be updated. The most current decontamination procedures will be made available at Forest Service offices and will be provided to persons obtaining a permit. A separate protocol will be provided to persons handling bats for research purposes.