

VOLUME 7, NO. 2 Summer 1989

Sorry, no PDF
available

The Fight for Mt. Etna

The Furor Over Australia's Longest Running Conservation Battle Heats Up. . .

The Furor Over Australia's Longest Running Conservation Battle Heats Up . . .

For over 25 years Mt. Etna in central Queensland has been the focus of a tug of war. Conservation groups want to preserve the mountain's natural habitat, and the Central Queensland Cement Company (CQC) wants to continue to mine its limestone reserves. Inside Mt. Etna is the most concentrated system of caves in Australia; 46 have been named and mapped, and many are noted for their spectacular formations. The mountain's caves are home to the rare Ghost bat (*Macroderma gigas*), whose declining populations now number only about 3,000. Sheath-tailed bats, horseshoe bats, and two species of bent-winged bats are also sheltered by the caves.

A ten year study by the Queensland National Parks and Wildlife Service has shown that at least two of Etna's cave systems, Speaking Tube and Elephant Hole, are essential as over-wintering roosts for pregnant Ghost bats. Both caves are in the path of proposed mining expansion, something that conservation groups have been working hard to prevent. The study called for immediate protection of the threatened caves, but the Queensland Government kept the report under wraps for nearly a year. The cement company rejected it altogether, contending that their own report, compiled by an independent environmental consultant firm, "proved" that the two caves were not significant to bats. Their conclusion was based on field work conducted over only a four-month period.

In the spring of 1988 CQC announced plans to blast Speaking Tube and Elephant Hole. Although public outcry and pressure from conservation groups forestalled immediate action, last November both caves were partly destroyed and their entrances filled with rubble. The blasting killed some Eastern horseshoe bats (*Rhinolophus megalophyllus*) and Sheath-tailed bats (*Taphozous georgianus*), but it appears that no Ghost bats were in the caves at the time. The destruction has serious consequences for the future of Ghost bats, but the fight to save Mt. Etna is far from over.

Since conservation groups have failed to stop the mining and have exhausted most approaches, the battle is now being fought in the courts. In March 1989 the High Court of Australia granted the Central Queensland Speleological Society "leave to appeal." The ruling is considered a major victory for conservation groups that traditionally have been ruled against. An injunction against CQC also prevents them from mining the caves blasted last fall. The appeal to be heard by the High Court will decide whether the caving group has the required "standing" to take legal action against the mining company.

In another victory for conservation groups, the Court ruled there was a "serious question to be tried on breaches of the Fauna Preservation Act." Under the Australian act, all five bat species on Mt. Etna are protected. In addition, the Geneva-based International Union for the Conservation of Nature and Natural Resources (IUCN) listed the Ghost bat as vulnerable in its 1988 Red List. Early last year the IUCN General Assembly called upon the Queensland government to protect Mt. Etna and its wildlife.

Although Ghost bats use Johansen's Cave on nearby Limestone Ridge as a maternity roost for giving birth and rearing their young, Mt. Etna is particularly crucial for the continued survival of these bats in the area. Speaking Tube Cave provides a warm over-wintering roost for all the pregnant females. The location of the cave, combined with its upward sloping chambers, creates the warmest winter cave conditions in the entire area, and large open flyways inside the cave make roost access easy for heavily pregnant females. Ghost bats cannot lower their body temperature and they do not cluster, so they must find roost sites with temperatures above 68 Fahrenheit. Below this temperature they have to shiver to keep warm. Speaking Tube is one of the few caves which remain above 68 during the winter.

A national survey showed that the range of Ghost bats has been diminishing, particularly over the last 200 years. The population dependent upon the mountain and the adjacent Limestone Ridge has declined noticeably since mining began in 1967. At that time, the Limestone Ridge population was estimated at 450 though there could have been more in other caves. The last official survey in 1985 indicated that only 150 are left in the entire Mt. Etna area. This is the largest known Ghost bat colony in Queensland.

One of the arguments conservationists have been using to save Ghost bats is that the bats have been providing researchers with valuable clues to human hearing problems. A research program at the University of Queensland's Center for Vision, Touch and Hearing is focusing on the unique hearing ability of these bats. Ghost bats can pick up sounds 400 times less intense than can be heard by the human ear. Such research is already leading to the development of new and better hearing aids.

Mt. Etna also provides vital habitat for other species of bats. Bat Cleft Cave has optimal conditions for Little bent-winged bats (*Miniopterus australis*) to give birth and nurture their offspring. The cave is the most important of five known maternity sites for the species in Australia, sheltering some 80% of the total population. The famous Bat Cleft emergence is one of Australia's greatest wildlife spectacles. Up to 300,000 bent-winged bats exit at dusk from a narrow entrance as predators await. Pythons, brown tree snakes, and giant tree frogs congregate to feast on the emerging bats, making the nightly event a popular sight with tourists. Bent-winged bats are insectivorous, and estimates are that the Mt. Etna population consumes at least a ton of insects each night.

In February 1988 the new Queensland Premier, Michael Ahern, declared Bat Cleft and its immediate environs on Mt. Etna a reserve. Nearby Limestone Ridge, where the Ghost bat maternity cave is located, was protected in 1976 by making it a National Park. Paradoxically, Mt. Etna's former status of protected reserve was withdrawn in the mid-70's, which left most of the mountain wide open to exploitation.

Mining has continued unabated outside the protected area of Mt. Etna, resulting in a horribly scarred landscape. What has taken millions of years to form is being destroyed in mere decades. Many caves have been damaged by shock waves alone. Other caves have already been blasted and bulldozed, and magnificent formations from places with names like Crystal Palace Cave are now cement slabs in distant cities.

Speaking Tube Cave is still salvageable and is needed by pregnant Ghost bats as a safe over-wintering roost when the temperature of surrounding caves drops too low. Ghost bats use Elephant Hole Cave, also partly destroyed, as a night feeding roost. The main reason why Ghost bats survive on Mt. Etna is because of the diversity of caves available for different needs. For a species already in trouble, destroying crucial roosts is an act destined

to hasten its decline.

Mt. Etna may contain a wealth of limestone, but there are other, larger nearby deposits that are mined by the parent company of Central Queensland Cement without as much negative impact on the environment. Denise Bond, a Project Officer for the Australian Conservation Foundation, sums it up: "The destruction of the habitat for a rare species simply cannot be justified by the extraction of such a common resource as limestone..."

(sidebar)

Update on Mt. Etna

As this issue was going to press, BCI received word from Dr. Les Hall, a BCI Scientific Advisory Board member from the University of Queensland, that the battle to save Speaking Tube Cave on Mt. Etna had been lost. On June 8 the Central Queensland Cement Company won a six-month court battle giving it the right to blast the cave immediately. Mining workers prepared for the blasting all weekend and on June 13, it was destroyed. At the time, the Company had enough limestone resources for eight years—more than adequate time to resolve the issue without further destruction of the mountain. Using stalling tactics in the courts, the cement company exhausted the conservationists' resources; for lack of funds, the conservation groups lost the chance to present their case in court. The day the cave was destroyed was the day the hearing had been scheduled to save it.

An editorial in the Brisbane Courier-Mail voiced the outrage Australian conservationists feel today: "Serious questions need to be asked about the priorities and perceptions of a Government able to stand by and allow such environmental vandalism." Prior to this development, BCI had planned to ask members to send letters in support of halting the mining activity on Mt. Etna. Your letters of protest could still help in preventing future devastation. Write: Premier Michael Ahern, Parliament House, Brisbane, Queensland, Australia 4000 (to address the Queensland Government); and to Senator Graham Richardson, Minister for the Environment, Parliament House, Canberra, Australia 2600 (to address the Federal Government). BATS will publish a follow-up in the next issue.



The northwest slopes of Mt. Etna in Queensland have been deeply scarred by limestone mining. The entrance to Speaking Tube Cave, the focus of the current controversy, can be seen at the edge of mining activities in the center of the photograph. PHOTO BY JOSEF VAVRYN



Ghost bats on Mt. Etna have seriously declined since mining began over 20 years ago.
PHOTO BY MERLIN D. TUTTLE

All articles in this issue:

- ▶ [On the Cover](#)
- ▶ [The Fight for Mt. Etna](#)
- ▶ [Extending an Invitation to Bats](#)
- ▶ [If you have bats in your bat house and want to know what kind they are](#)
- ▶ ["Flight of Fancy" Bat House](#)
- ▶ [Dr. Campbell's "Malaria-Eradicating, Guano-Producing Bat Roosts"](#)
- ▶ [A Campbell Bat Tower Restoration Project in Texas](#)
- ▶ [Bat Houses in State Parks: An Experiment in New York](#)
- ▶ [THE ONE STEP](#)
- ▶ [LETTERS](#)
- ▶ [BCI Chairman Receives National Conservation Award](#)
- ▶ [Andrew Sansom Joins BCI Board of Trustees](#)
- ▶ [CITES Flying Fox Proposal Needs Your Help](#)