percent." That's still too high for physicists to break open the champagne (to declare a bona fide detection, they would need to push the probability of error below 0.001%), but it is enough to raise eyebrows.

If real, the tau-pair excess would signal the end of the Standard Model and the beginning of the supersymmetric era. However, the result may also be a fluke that will disappear with more data, as other supersymmetry sightings have done in the past. More data are due to be released on July 20, and the experiments will continue until September. That probably won't be enough time to resolve the issue, the physicists say.

Ironically, if the death knell for the Standard Model comes, it probably won't toll at LEP: This fall, the device is slated to be dismantled to make way for the Large Hadron Collider experiment. **–CHARLES SEIFE**

MOUNT GRAHAM

Report Finds Squirrels Survived 3 Telescopes

TUCSON, ARIZONA—For 15 years, Mount Graham has been a battleground for astronomers, who want to build a cluster of telescopes, and environmentalists, who say that such activity could wipe out an endangered subspecies of red squirrel. In 1988 Congress allowed construction of three telescopes on the mountain, a desert "sky island" northeast of here, prompting the U.S. Forest Service to order a long-range study to monitor the squirrel's population. The results are now in. But the findings—that the work to date has had "no significant effect" on the rare rodents—have done little to resolve a debate that is expected to heat up again next year when the University of Arizona (UA) seeks permission to build four more telescopes.

"We tried hard to find something that would display a negative effect, but we couldn't," says UA population ecologist Paul Young, who directed the 10-year, $2.5 million monitoring program. "What really determined what happened were variations in the [pine]cone crops the squirrels depend on in the fir, spruce, and mixed conifer forest, not these three telescopes."

The UA-funded study, which the forest service approved when it allowed construction on 3.4 hectares of squirrel habitat near the 3300-meter summit, began in 1989. Since then Young has led a five-member team that conducted monthly, and then quarterly, censuses of the squirrels' middens. They found that the population increased from a low of 33 squirrels in 1989 to 102 late last year, with a spike of 225 at mid-decade. The changes were based on food supply, and the pattern within the construction area paralleled that in a control site elsewhere on the mountain.

Both findings are exactly what Chris Smith, an evolutionary ecologist at Kansas State University in Manhattan with no stake in the outcome, would have predicted. "They looked at the narrow question of the observatory's impact on the immediate population, did it thoroughly, and turned up no surprises," he says. "Those squirrels get used to people easily."

Proponents of the telescopes say the results vindicate their position—both past and future. "This report confirms what we have been saying all along, that the telescopes would not affect the squirrels at all," says Buddy Powell, associate director of the UA's Steward Observatory, a partner in the Mount Graham facilities. Powell also believes the study bolsters plans to build additional telescopes on an adjacent site. "It suggests the squirrels would not be harmed by four more," Powell says.

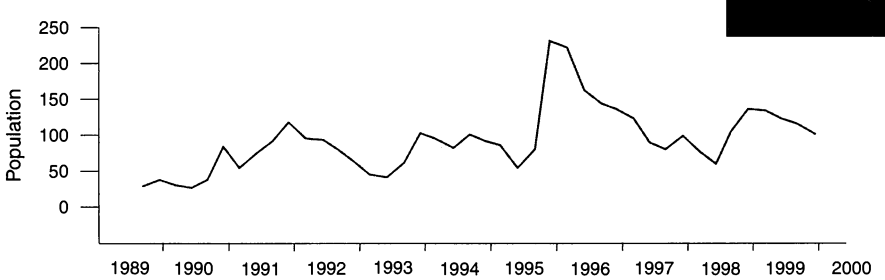
Environmentalists, however, disagree with Powell on both points. Robin Silver, conservation director of the Southwest Center for Biological Diversity in Phoenix and longtime opponent of the telescopes, says the data are tainted by Young's university financing and the lack of outside review. "They should have given this project to another university or an outside company," Silver says.

Peter Warshall, a San Francisco–based ecologist who produced the original environmental impact statement for the observatory project in 1986, disputes Powell's view that the monitoring justifies more telescopes. Instead, Warshall, who leads Scientists for the Preservation of Mount Graham, believes that the sharp fluctuations demonstrate the squirrel's long-term vulnerability to environmental assaults. "There are so many uncontrollable forces threatening these squirrels, from cone crop failures and forest fires to tree diseases and windfalls," Warshall says. "The question is whether there's room to add the controllable impact of destroying more forest to build more telescopes—and this study doesn't answer that." To underline their concern, on 30 June Warshall's and Silver's groups filed a federal lawsuit to block construction of a buried 37-kilometer power line to the telescopes.

Young agrees that his results don't represent a green light for astronomers. "There hasn't been any significant impact from the first three telescopes, but that doesn't mean we should build more," he says. "I definitely think the red squirrel is in a precarious place. ... This is an island species, and in general island species go extinct."

The next major battle over the mountain will be a formal proposal to the forest service to build other instruments, including possibly a wide-field camera and a 6.5-meter telescope. But that won't be submitted for at least a year, until work is completed on the third and largest current project, the $83.5 million Large Binocular Telescope. In the meantime, Young—who is preparing to hand off responsibility for the monitoring project and take on another position—doesn't expect to have the last word. "Something tells me both sides will continue to have a field day with the data," he says. **–MARK MURO**

Mark Muro writes from Tucson.



Holding on. Census shows a rise in red squirrel population (*inset*) during construction of three telescopes on Mount Graham in southern Arizona.

CREDITS: (LEFT TO RIGHT) P. L YOUNG; V. L. GREER

EUROPEAN SCIENCE

Pathogens Lab Chief Stripped of Duties

PARIS—Europe's most advanced high-security pathogen lab has claimed its first human casualty—and it hasn't even opened for business. On 28 June, the Marcel Mérieux Foundation, which funded the construction of the $8 million facility in Lyons, banned lab director Susan Fisher-Hoch from the premises and launched legal proceedings to dismiss her. Fisher-Hoch's most egregious offense, it appears, was speaking with the press.

The turmoil at the biosafety level 4 (BSL-4) facility comes in the wake of a takeover of the lab's scientific direction by the Pasteur Institute in Paris. The Mérieux Foundation teamed up with Pasteur after failing to convince funding bodies to finance the lab's estimated $1.4 million annual budget. In exchange for footing a still-undecided portion of the lab's bills, Pasteur insisted that one of its own scientists become director (*Science*, 30 June, p. 2298). That presented a problem, however, as Fisher-Hoch has a contract naming her director until February 2002. At the foundation's request, she says, she prepared a proposal for a new contract. Fisher-Hoch agreed to give up the directorship if she could run some of the lab's international relations and do research into a Lassa fever vaccine.

Fisher-Hoch claims she received "no reply at all" to the proposal before being "presented simply with an ultimatum to get out of the lab." Foundation Secretary-General Claude Lardy counters that she personally told Fisher-Hoch that the proposal was "completely unacceptable" because it gave her too much independence and authority. Complicating matters, Fisher-Hoch has been in hot water over an incident earlier this year in which she allegedly stored potentially virus-infected blood samples in the lab before it was certified to hold them. Fisher-Hoch denies the allegation, saying that the samples were drawn from healthy doctors and nurses during a workshop in Liberia. Nevertheless, the primary grounds for Fisher-Hoch's dismissal, cited in a 28 June letter to her from the foundation, are that she spoke with journalists about the foundation's decision to replace her as director.

On the way out? Hot-lab director Susan Fisher-Hoch is fighting her dismissal.

CREDITS: (LEFT TO RIGHT) R. GAILLARDE AND R. BÉNALI/GAMMA; DON WINDSOR

Fisher-Hoch has hired an attorney to help fight her dismissal. In the meantime, no one is about to suit up for the pathogen lab: Local officials have delayed the facility's opening, planned for this month, until whoever takes over presents bona fide credentials for running a BSL-4 facility. **–MICHAEL BALTER**

EVOLUTIONARY BIOLOGY

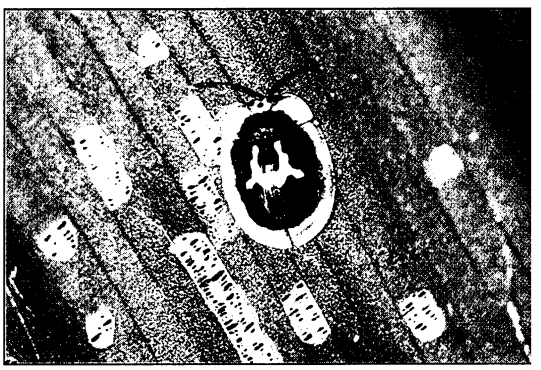
Chewed Leaves Reveal Ancient Relationship

God, the great British geneticist J. B. S. Haldane once remarked, must have "an inordinate fondness for beetles." And certain beetles have an inordinate and, it turns out, historic fondness for ginger plants. Paleontologists have discovered how ancient this culinary preference really is by studying fossils of damaged leaves. The data help push back the time when a group of beetles called leaf beetles evolved their great diversity and demonstrate just how faithful some species can be to their favorite foods. The results are also convincing paleobotanists that they can sometimes glean more about their plant's ancient past from a chewed-up leaf fossil than from a pristine one.

On page 291, paleobotanist Peter Wilf of the University of Michigan, Ann Arbor, Conrad Labandeira, a paleobiologist at the Smithsonian Institution's National Museum of Natural History in Washington, D.C., and their colleagues describe a new beetle fossil based not on traces of the insect skeleton—in fact, the insect itself never even shows up in the fossil record—but on the distinctive gouges the beetles left when they munched on 11 ginger leaves many millions of years ago. The chew marks of the newly described *Cephaloleichnites strongi* prove that leaf beetles underwent rapid evolution and diversification more than 65 million years ago—far earlier than the oldest fossils of insect bodies suggest—possibly taking advantage of (and perhaps influencing) the rapid diversification among flowering plants occurring at the same time.

What's more, *C. strongi* represents the earliest known rolled-leaf beetle species, hundreds of which today still are picky eaters, preferring just one of the ginger- and heliconia-like plants in the Zingiberales order. For decades, ecology students have learned about this impressive array of beetle-plant pairings, in which different rolled-leaf species adopt the same lifestyle but on their own distinct host plant. This new work adds "a historical dimension to this emblem of tropical biology," says Brian D. Farrell, an insect evolutionist at Harvard University. Adds Phyllis Coley, a tropical ecologist at the University of Utah, Salt Lake City: "The beetles and the gingers are an extremely old and conservative pairing, which in turn suggests that each could have had profound selective effects on the other."

As a young ecologist in the 1970s, Donald Strong—the fossil's namesake—could not help but notice the vast variety of rolled-leaf beetles, whose larvae take up residence inside the young, curled leaves of gingers, heliconias, and their relatives, plants that thrive in the understories of tropical forests of the Western Hemisphere. In particular, he was enchanted by what the beetles did to the leaf itself. Their damage becomes quite apparent as the leaf unfurls and serves as a lasting reminder of a beetle long gone. "It was an issue of artistry, how beautiful the damage was," recalls Strong, now at the University of California, Davis.



Telltale jaws. From the characteristic chew marks left on fossilized leaves, researchers have identified an ancient beetle and its favorite food. Rolled-leaf beetles today still munch on ginger plants, as shown by the characteristic damage on this leaf from Panama.

Over the next few decades, Strong documented the specialized associations among different beetles and particular plant species. Eventually, he learned to identify a beetle species from the leaf's chew marks, which varied according to the size and shape of the particular beetle's jaws.

Wilf came across Strong's research in 1998, when he and Labandeira were studying a different sort of insect damage—tiny fossil pellets, mysterious specks of fossilized material found on 53-million-year-old fossil leaves he had collected from Wyoming. Until that time, Wilf hadn't really noticed the chew marks. But when he and Labandeira took a second look at the leaves, "we realized the damage [seen by Strong in the modern leaves] matched beautifully with what we had," Labandeira recalls. Moreover, the fossil leaves looked very much like some modern gingers. Even after millions of years, says Wilf, "[the beetles] are eating the same thing, and they are doing it the same way."

Soon Labandeira found even older leaves bearing the telltale signs of the rolled-leaf beetle. While working with Kirk Johnson at the Denver Museum of Natural History, Labandeira noticed that some of Johnson's fossils, whose identity he didn't yet know, also had chew marks resembling *C. strongi*'s. And they, too, turned out to be fossil gingers. Because these fossils came from a North Dakota deposit dating back to the Late Cretaceous, "we now know this insect