

The Herald-Sun (Durham, NC)

May 7, 2001 Monday
Final Edition

Scientists try to record all organisms in the Smokies

BYLINE: Associated Press

SECTION: DURHAM; Pg. B5

GREAT SMOKY MOUNTAINS NATIONAL PARK, N.C. - The Great Smoky Mountains National Park is one of the most popular in the United States with 10 million visitors each year, but scientists know very little about the plants and animals that live there.

That's all about to change.

A new project, called an "all taxa biodiversity inventory," is being conducted by a nonprofit organization that will try to identify every living organism in the park. It's being touted as the first of its kind in the world.

Of an estimated 99,000 species living in the Smokies, which straddle the North Carolina-Tennessee border, scientists have identified and described fewer than 10,000.

"It's really a national treasure, and we don't know a lot about it," said Janet W. Reid, a research associate at the Smithsonian who is working on the inventory.

The inventory, which is being run by **Discover Life in America**, has netted about 100 species that had never been named before and more than 1,200 never before found in the Smokies.

Included in the tally are 38 spiders, 18 crustaceans, six slime molds, four earthworms and two mollusks.

The inventory, which started two years ago, is expected to wrap up in 10 to 15 years. Scientists say it will give them a better understanding of the mountains' diverse ecology, how species interact and how to protect one of the country's most visited - and polluted - national parks.

"I can't tell you how important this is for the protection of the park," Smokies senior biologist Keith Langdon said.

Scientists from all over the world have come to the park to gather samples - sometimes with the help of park staff and volunteers - to take back to their laboratories for inspection. The information then goes into databases to be shared with other scientists.

Jeanie Hilten, administrative officer for **Discover Life in America**, compares the project to the mapping of the human genome.

"To see people come from all over the world, really, coming here to look in treetops, look on the barks of trees, look at rock faces to find more species, it's humbling," Hilten said. "The information is going to be here forever."

The inventory has 21 outdoor research sites, scattered around at various altitudes and habitats. Each measures 100 square meters and is roped off with twine.

Scientists catch bugs on the ground with pitfall traps filled with environmentally friendly antifreeze, and flying insects are caught by a net that's stretched across two trees with a tube of alcohol at the end. Beetles are caught with funnel traps high in canopies, while boards are used to attract worms and slugs.

Volunteers check the traps and collect the specimens every two weeks.

"It is really exciting," said Melissa Skrabal, an undergraduate student from Central Missouri who will get to name a new slime mold she discovered. "Not too many undergraduates can say they found something new."