

Space spider mission not fruitless

By TREVA JONES
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Two spiders sent up in the Skylab II project to try out a Raleigh scientist's research died but not before encouraging the researcher.

The spiders were able to spin their webs in the weightless environment of space, proving that they can adjust to a new situation, according to Peter N. Witt, who bred and raised the spiders.

Witt is chief of research of the N. C. Division of Mental Health Services of the Department of Human Resources.

The spiders "were able to adapt to something for which they were never programmed," Witt said. "I think it's pretty remarkable.

"The question now is the evaluation of the webs," Witt said. "We must study the photographs taken inside Skylab." Witt said. The space-spun webs must be measured and compared to earth-spun webs for a real evaluation.

He expected the spiders to attempt a web even if they were "practically paralyzed" by weightlessness. But if they never catch food on their webs and are fed otherwise, "you would assume they wouldn't build on." But they do it all the time, whether they get a fly or not, he said.

The fact that the spiders performed on a higher level than expected taking just two days to learn to cope with their environment could shed some insight into human behavior under stress.

But Dr. Witt said he's holding out for the photographs and a scientific analysis of Arabella and Anita's webs before he draws any more conclusions.

Helpless at the beginning, the spiders floated along the threads they started spinning. After two days, they started moving straight along their threads, building "handles" from which to start their webs along the sides of their cages. They finally built "a real geometric orb web," said the pleased

researcher. Witt has worked with spiders for 25 years.

The adaptation to an unknown situation "goes much further than we were expecting," he said.

Spiders are individualistic and react to different situations just as individual humans do, he said. A larger sample is also needed to draw any real conclusions, he said.

The space spiders, Arabella and Anita, may have died because of improper feeding.

Arabella, the last survivor, was found dead in her cage at Marshall Space Flight Center in Huntsville, Ala., Saturday night and Anita died in the Skylab space station days earlier.

Witt didn't know until this morning that Arabella had died.

Arabella should have gone immediately to Huntsville and been given food and water when she landed. Instead, she went to Houston first, "and I have no idea what happened," Witt said this morning.