

DEATH SCENARIOS: One of the team's main field work objectives is to excavate Fako -- a site which has preserved a number of sauropod dinosaur skeletons. Sauropod dinosaurs are the largest land animals that ever lived. A single fossilized leg bone of a sauropod can be up to six feet long and weigh 400 pounds! Not only will the team collect the bones of *two* skeletons, they will also make maps of the site, study the rock the bones are preserved in, measure and draw pictures of the positions of the bones in the ground and carefully collect and other plant or animal fossils they find nearby.

Why do all this work? If you just excavate a skeleton and go home, you will leave half the story in the ground. All fossil sites preserve more than bones; they also preserve clues to the following questions: how did the animal die? what happened to it after it died? what other plants and animals lived at the same time? what was the environment and climate like when the dinosaur was alive? By looking carefully at evidence preserved along with the dinosaur's bones, paleontologists can begin to paint a more complete picture of the life and death of the animal -- they can reconstruct a "death scenario."

It is actually quite rare to discover a dinosaur skeleton with all (or most) of its bones in place. Usually bones get moved from their original positions and are found later isolated and broken. It is even more unusual to find multiple skeletons preserved at a single site.

There is a great mystery for the expedition team to unravel at Fako. What caused this group of huge herbivores to die? What happened to them before their bodies were buried? And how come they were all preserved together? Luckily for the team scientists have tried to answer some of these questions before about other mass death sites.

In 1927 a German naturalist named Johannes Weigelt wrote a book in which he described in detail the process and pattern of the way animals die, decay and get buried. He pointed out that there was a connection between the way modern animals die and are preserved and the way animals died and were preserved in the past.

Weigelt was particularly interested in events that caused groups of animals to die together. He developed a list of natural circumstances that could cause animals to die in groups:

- volcanic activity
- grass, prairie and forest fires
- drowning
- getting bogged down in mud
- quicksand
- flooding
- water gets salty
- drought or bodies of water drying up
- overcrowding
- extreme cold or heat

The team will keep Weigelt's list in mind as they look for -- and try to understand -- the mystery of the mass death site.



QUESTION: BASED ON WHAT YOU HAVE READ ABOUT JOBARIA, WHICH OF THE DEATH SCENARIOS DID THE TEAM FIND EVIDENCE FOR AT FAKO?