

# Kids' KOrner

## Cliff Dwellers Might Have Built For Warfare Defense, Not Comfort

SANTE FE, N.M. — The prehistoric Indian cliff dwellers of the American Southwest might not have been as peaceable as has generally been thought since their ruins were discovered a century ago.

Anthropologist Jonathan Haas, director of programs and research at the School of American Research here, talks enthusiastically about what he calls "a very new, different way of looking at things in the Southwest."

For the past four years, Haas has been exploring the mesas, valleys, and canyons around the Navajo National Monument in northeastern Arizona, testing his theories of conflict among the Kayenta Anasazi Indians 700 to 800 years ago.

### Tsegi Canyon Settlements

This past summer, Haas and his research team, with support from the National Geographic Society, found two previously unknown settlements in the Tsegi Canyon system, in the heart of an area that has been intensively surveyed over the past 75 years.

One of the sites, accessible only by way of a naturally concealed crack in the precipitous sandstone of a 900-foot butte, was a 200-room pueblo, one of the largest ever found in the region and once home to a sizable Kayenta population atop the mesa.

The other new find was a 30-room pueblo, unvisited for more than seven centuries, in a canyon rock shelter that could be reached only by an expedition member who is a skilled climber.

Both locations, Haas concludes, must have been selected for only one reason: defense against possible attackers.

Neither, he thinks, could have

been chosen for the reasons customarily attributed to the Anasazi: nearby arable land, readily available water, and protection from the weather.

Access to both required a rugged climb. Water and food sources were a considerable distance away. The mesa-top pueblo offered scant protection from the often harsh elements; the rock-shelter pueblo was built on a relatively steep slant, its narrow ledge of front yard disappearing over a 140-foot cliff.

The combined discoveries helped "blow the whole hypothesis of people moving up to the headwaters of the canyon," Haas says. "No one has ever thought to look on top of that butte for a site."

### Great Place To Live?

Some Anasazi Indians had dwelt in relative comfort in cliff houses for centuries. But, in support of his argument that this year's find and other late-settled Kayenta cliff dwellings were built for defense, Haas asks, "If they were such great places to live, why didn't anybody live there before 1250?"

Traditional wisdom has held that drought and other environmental pressures forced the Anasazi up the canyons, closer to dwindling water sources, in the late 13th century. By the beginning of the 14th century they were gone.

Haas takes exception to the conventional wisdom. "What happens when the entire region is in poor condition?" he asks. "It's at that point that warfare breaks out. And it's a raiding-type warfare."

To get away from the raiders and establish solid defensive positions, the Kayenta sought sites such as the inaccessible mesa and

rock shelter for their pueblos, Haas thinks. His major conclusion: "Warfare is a last resort for human populations."

Ancestors of the Kayenta Anasazi roamed the Southwest 10,000 years ago. By about 5000 B.C., nomadic bands were formed. Not until about A.D. 500 did a distinctive Kayenta culture start to emerge. Starting about 700, the Kayenta lived in pueblos.

In the Long House Valley of Arizona, where Haas has done much of his research, small villages appeared between A.D. 1000 and 1150.

By 1250, apparently as a result of erosion, drought, and a sinking water table, villages on open sites were abandoned by the hundreds. The Kayenta started building hard-to-reach shelters on the buttes above the valley. Once small villages consolidated in five distinct clusters. Pueblos of 75 to 400 rooms emerged.

Significantly, Haas notes, all five clusters were on high hilltops. All were strategically positioned to see each other. When a hill blocked the line of vision between two of the clusters, residents cut a notch in the hill. "The main thing you can infer from that pattern is that they were communicating with each other," Haas says.

### Warfare Incentive

And one reason to communicate may have been warfare. Investigation of a nearby burial site disclosed only five males among 42 remains. This led Haas to think that most of the men in the settlement were away fighting battles. "It was tantalizing evidence," he says, "but not convincing."

Searching for conclusive evidence, he used topographic maps



Unseen by human eyes for seven centuries, newly discovered 30-room Anasazi Indian cliff dwelling in northeastern Arizona is nearly inaccessible beneath a hard-to-find rock shelter. A difficult climb up a 140-foot cliff led to its discovery. Anthropologists believe it was built solely for defense.

and a computer to pinpoint defensive site locations above the region's canyons. Through the computer he then located the sites that were linked visually.

It all came together. Long House Valley, Klethla Valley, and Kayenta Valley had visually linked pueblos in defensive positions, and one pristine site had a six-foot stone wall. Only Tsegi

Canyon, with its cliff dwellings, remained a question mark.

Haas considers this year's findings "all new stuff" that will shake a large limb on the tree of conventional anthropology. "People are beginning to look at patterns that have been staring them in the face for a long time, and recognize those patterns for what they are," he says.

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|-----------|---------------|
| 1. BLACK  | 6. GRAY       |
| 2. RED    | 7. GREEN      |
| 3. YELLOW | 8. LT. BROWN  |
| 4. BLUE   | 9. LT. BLUE   |
| 5. PINK   | 10. LT. GREEN |

DOLPHINS ARE SMALL WHALES WITH TEETH AND A TAPERING SNOUT. THEY ARE INTELLIGENT ANIMALS COMMUNICATING WITH EACH OTHER BY WHISTLES, CHIRPS, SQUEAKS AND GRUNTS. SCIENTISTS ARE TRYING TO LEARN THEIR LANGUAGE, HOPING SOMEDAY TO BE ABLE TO COMMUNICATE WITH THEM BY TEACHING THEM TO TALK.

