Snively, Dykes explore the Colorado River

By Richard Marx
Staff Writer

This past summer two Clackamas Community College staff members took a trip to the Colorado River. CCC science instructor John Snively and registrar Mary Dykes were part of a group of sixteen people who rafted their way through a portion of the state of Arizona.

As a geology instructor, Snively traveled to this region to obtain first hand information for his Natural History of Parks and Monuments class which will be taught during winter term.

"One has to first receive a permit to take one of these rafting trips on the Colorado, sometimes taking as long as seven years before finally getting it," said Snively.

An acquaintance of his had acquired his permit for a group and had an opening for an extra person. In this way, Snively was invited to go along.

The trip started at Lee's Ferry and extended through the Grand Canyon. Also a section of their trip went into the Hopi and Havasupai Indian reservations. All of this covered a total distance of about 236 miles. Snively was the oarsman of the raft that he and Mary had shared.

"We never flipped a raft or a boat," boasted Snively, "but we filled them to the rim with water repeatedly."

"Reading the water was the most important skill because once you start your path, there is no turning back. You had to watch out for whirling eddies that form whirlpools which could suck the raft right under the water. Though we were caught several times in a circular motion we were never pulled under," Dykes commented.

The Colorado River is famous for its rapids. "Every day there is a fluctuation between 4,000 to 30,000 cubic feet of water per second in this river," added Snively, "which runs out from Lake Powell." People traveling this stream ride waves or troughs down the river.

The rapids are rated according to water levels running on a scale from one to ten. Snively stated that "these are quite different from our Northwest rivers which are rated from one to six, with six being virtually impossible to run and leading to certain death.

Rapids of the six and ten category can be manageable on the Colorado however. This is because while the water volume is large enough to create twenty foot waves, there are not the potential obstructions such as boulders as our northwest rivers have.

"Nevertheless, the Colorado can put the fear of God in you," he added grimly.

Because of its geography, the area is a global mecca for geologists. The Grand Canyon region is composed of rock formations that cover a time span from 1.8 billion to sixty million years in age, which covers about one half of the earth's age.

According to Snively, this stratigraphy is different from the geological formations of Death Valley, those of the Grand Canyon being neatly layered one on top of the other rather than jumbled.

"The Grand Canyon is actually composed of both an inner canyon and an outer canyon," said Snively.

The inner canyon was carved out of 1.8 billion year old schists and granites, and is the gorge through which the Colorado River flows. Sedimentary sandstones, limestones and shales make up the geology of the outer canyon. These are about 400 million years old, thus are roughly Paleozoic and represent the transgressing and regressing seas over the continent. Included here also is the Cambrian formation which dates back to about six million years, where fossils abounded for the first time in earth's history.

"Aside from the thrill of doing the Colorado River, seeing from bottom to top a sequence of the earth's history was the most fascinating aspect of the trip," said Snively.

The Grand Canyon runs in elevation from 1700 to 9000 feet and includes all lifezones ranging from lower Sonoran (typical southwest desert) up to the Hudsonian (timberline) at the north rim. The group spent most of their time on the river which runs through the Lower Sonoran, venturing away only occasionally to explore a few side canyons.

"The inner canyon walls are very steep and the only place along this stretch where you could hike out of the canyon was at Phantom Ranch," Snively commented.

While Snively was concentrating on the geologic aspects, Dykes said that she was mainly interested in animal life.

A view of the Grand Canyon from the top. Each layer of rock in the outer canyon is a remnant of the receding and advancing shoreline from an ancient sea.

"It was fascinating to wake up in the morning and see all the 'critter' tracks, including those of the tiny sand scorpion, toads and also the slither marks of snakes, in the sand," Dykes said.

One of her most memorable experiences was seeing a rattlesnake. "When John (Snively) went to tie the raft around a tamarisk bush he saw a large three foot long Grand Canyon rattlesnake in the middle. I was called over to look at it but did not see it at first because of the beautiful camouflage. The snake was very passive and non-aggressive and I was very impressed with its gentleness," Dykes recalled.

Of mammals, there were several Desert Bighorn Sheep observed, including a ram that you could walk up to within twenty feet. Also there were ringtails, a relative of the racoon, that would raid the camp every night. A number of birds were also observed including peregrine falcons, pinon jays, great blue herons, American avocets, as well as blue wing teals in drab summer plumage. The last three species were observed along the river.

"It was a strange site to see great blue herons sitting on the rock outcrops along the river when we associate them with the official city bird of rainy Portland," Snively commented.

Dykes was amazed to see the variety of birds there and at how the wading birds could manage to balance themselves and view their prey in such rough muddy waters.

The vegetation was mostly in a dry condition, the only plant flowering being a fish-hook cactus. A number of different cacti species were observed as well as century plants and ocotillo.

"We saw a whole forest of ocotillo right after a rain, their spiny whip-like branches covered with delicate tiny light green leaves," noted Dykes.

The weather was a hot 100 plus degrees, but was actually below the usual August average of 115-120 degrees.

"We were blessed with three days of heavy monsoon-like rainfall, which turned the river into pure chocolate and also prevented us from exploring several side canyons," Snively said. "The rain was warm, almost tropical," he added, "with the side canyons filling 15 to 20 feet high, but we had the rare opportunity to see 2000 foot waterfalls every quarter mile. Incredible!"

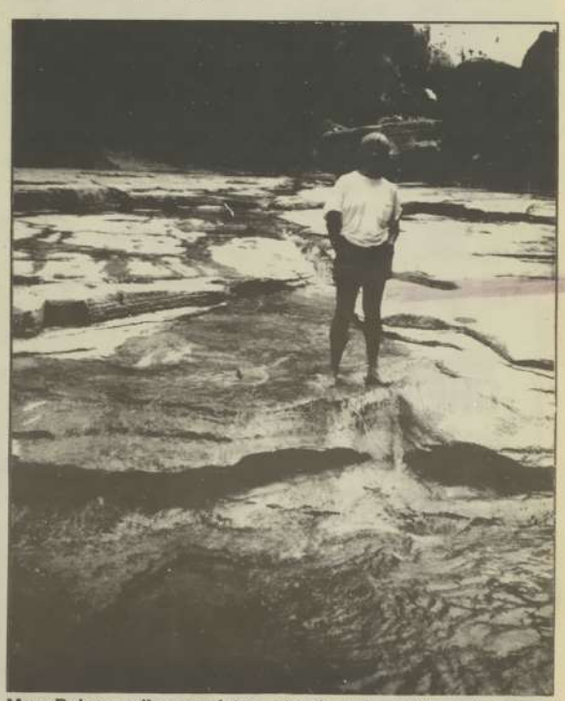
Everyone was impressed with the no impact style of camping. "Every campsite was pristine," said Dykes adding that, "you pack *everything* out!"

The forest service checks to see you have the equipment to do that.

The trip was enjoyed by all, but perhaps Mary Dykes' statement expresses it as well as any: "I loved it even though it was terrifying."

Photos by John Snively

One of the rafts on a calm section of the river. The group journeyed down the Colorado River during the summer break.



Mary Dykes, college registrar, stands at the entrance to one of the side canyons. During heavy rain these canyons were filled with water.