To make his life on earth more worthwhile, the individual needs to be on good terms not only with his human neighbors, his automobile, radio and good books, but also with the natural environment about him, the earth which nurtures him and the plants and animals which share it with him. If education is to contribute to this better life, it must come as well from deeper understanding and appreciation of the beauties and processes in living nature as from study of the humanities and the arts.

—G. B. Gunlogson
Forty years ago the foundations were laid for the present naturalist division of the National Park Service. (See Yosemite Nature Notes, July, 1960) The early "Nature Guides" recognized a need for training children in the use and enjoyment of National Parks - thus a new program was born.

The Yosemite Junior Nature School, organized in June 1930 under the leadership of Park Naturalist C. A. Harwell, superseded the children's nature walks of previous summers. Lasting through 1954, the school had six week long sessions each summer, with a different subject each day. Trees, birds, mammals, flowers and geology were covered. A classroom was made available in the museum and short hikes were taken to give practice in observation and interpretation. Two ranger-naturalists were in charge, assisted by several ladies resident in the Valley.

In 1934 the 379 children in attendance were given a test card which described definite goals designed to fulfill the school's objectives. When the test card was completed an award card was given as recognition. A group of advanced children headed by capable leaders spent considerable time in setting up what was hoped to someday become a junior museum. Interesting exhibits covering several phases of natural history were set up.

By 1937, guided by Ranger-Naturalist Walter Heil, two issues of a Junior Nature Notes Magazine were published containing nature stories written by the children. A total of 410 children attended the program that year. World War II curtailed the program which was revived in 1949 by Associate Park Naturalist Harry C. Parker.

The present Junior Ranger program, begun in 1955, was authored by Naturalists D. E. McHenry and W. W. Bryant. At the outset this pro-
gram was for youngsters from seven to fifteen years of age. In more recent years it has had to be restricted to children eight to 13 due to ever-increasing attendance.

Junior Rangers is now a week long course with a different subject covered each morning. Trees, birds, mammals, and reptiles are discussed with the last morning reserved for a hike during which the subject matter of previous sessions is brought together as ecology. The program stresses activity. Hikes, exploration, and observation are the keynotes. Lecturing is kept at a minimum, but discussion is encouraged. Pure identification of plants and animals is played down in favor of stressing relationships between plants, animals, soil, and water. Names of Yosemite's plants and animals would be of little use, at home, to youngsters from all over the United States. The principles of ecology, however, apply everywhere.

An area behind the new and popular Happy Isles Nature Center has been set aside for the Junior Ranger program. Here, outdoor work tables and storage areas facilitate instruction. Space is adequate for seventy to eighty children though class attendance has sometimes exceeded 120. Four ranger-naturalists and an enrollment assistant conduct the two-and-a-half hour sessions. With increasing demands an afternoon and two evening programs have been scheduled. Prior to this year an afternoon craft class was held once each week. This year the craft class was replaced by a session on fire search, and rescue each Wednesday from 1:30 to 3:00 p.m. Taught with the assistance of Park Rangers, instruction is given in trail safety, fire prevention, and rescue operations to
large groups of children and their parents. Evening campfires, Tuesdays and Thursdays, feature Indian lore and geology.

Awards, in the form of badges and patches, are given to participants attending a specified number of classes. Concern over the awards becoming ends in themselves has been expressed. Evaluation of graduates has proven this to be untrue — the majority of the children attending have shown a distinct desire to learn plus a surprising level of competency in subjects covered.

This year the program was strengthened to appeal more to twelve and thirteen year olds. (The number in each age group varies considerably from week to week, but the oldest group is consistently the smallest.) A special Friday-morning hike of five miles was scheduled and a donkey was rented to carry equipment and add excitement. Along the trail attention was paid to the lessons of the week and also to problems of donkey management. The hike ended at the stables at 2:30 p.m. An increase in the numbers of twelve and thirteen year olds was immediately experienced.

Yosemite's Junior Ranger program is, no doubt, here to stay. In the eight weeks of morning sessions in 1960 more than 1,000 children enrolled in the program. Public reaction has been favorable and rangers and naturalists have enjoyed the experience of working with children in the out-of-doors. Learning situations have been ideal! Into what other classroom will a bear walk and add his bit to the lesson? From what student desk may a belted kingfisher be watched putting on an exhibition of fishing skill that yields a fish with every "cast"? Only in the Junior Ranger "school"!

Training offered by the Junior Ranger type program is needed to help our next generation more fully appreciate and more competently use our national parks. In the age of Sputnik this is one of the rare cases where education is aimed solely toward pursuits of peace without cold war overtones. A national park is a delicate jewel surrounded by a mounting of high speed living. Natural features found in national parks suffer greatly at the hands of ignorant citizens. Picked flowers, carved trees, trampled meadows, and animals fed with strange and detrimental foods move our parks closer
to complete loss. Through the training of our young people these treasures will be securely protected.

In 1934 Ranger-Naturalist Reynold E. Carlson said in *Yosemite Nature Notes*, "The next generation of adults, who will doubtless have more leisure time than the present generation, will find increasingly in our national parks and in all of nature a worthy use of that leisure. While the next generation is still in its childhood is the time for instilling those lessons in conservation and appreciation of the out-of-doors which are so much more easily impressed upon children than upon adults. It was with this purpose in mind that the Yosemite Junior Nature School was organized." This is also true of the present Junior Ranger Program.

JUNIOR RANGERS AT HAPPY ISLES

Lorraine Miles, Ranger-Naturalist

The blue sky foretold fair weather, the faint breeze only suggested a jacket; boots, sandals, oxfords, and loafers - small size - scuffed at the needle-laden dust and bits of granite. From a chaos of footprints to orderly imprints took about 20 minutes, and away we went. The rye bowed only slightly as we passed; the wooly mint stem gave forth its secret beneath the fuzz as small hands discovered its shape. The black bear's log gave evidence of food haunts to new eyes. Even the ears so accustomed to horn, sirens, brakes, and doorbells took in the call of the red-shafted flicker; a soft whisper drew attention to his flight and destination. California ground squirrel eyed the procession with curiosity. Brown creeper stopped his progress up the trunk of a black oak just long enough to watch the aggressive oxfords balance on the log over the creek and make it to the other side; just long enough to wonder at the unsteady hesitation as sandals tried the log for the first time.

Sense of sure ground beneath the soles gave reassurance in the dense wood. Wide eyes looked for the newness, and bold strides covered the heart that beat fast with expectation. Up the bear trail, the sandals and loafers found rocks which were not steps and eyes watched and ears listened.

Brown blutchers, size 8½, stopped, ears strained and were rewarded. Steller jay scolded an intruder. Chickaree bounded to the limb of an incense cedar. Crashing of limbs, violent rustling of leaves, quick swishing of ferns heralded an approach. Rolling and nipping, tripping and growling, two young cubs gamboled into sight. Each pair of boots, each pair of sandals strained to the toes, supported eager hearts and eyes, and minds as their wish came true. No garbage can here - no bag of goodies to tempt the cubs. Each head followed the course of the chase up the ponderosa pine until the leader was pulled to earth by his playmate and both tore through the fern, the rye, past the log and the wooly mint, out of sight to lie peacefully for a moment, or to seek their mother's milk.

A reward in the quest to understand Nature's ways — Junior Rangers discovered some of Yosemite's secrets.
It all started because we canceled the hike. Not much sense in taking a 12 mile naturalist conducted hike with only three people. What to do all day long? — We’ve plenty of campfire wood chopped — next weeks’ program has been planned and July’s report is done — what to do?!

Well, this brand new Mission 66 campground at White Wolf had had a summer and a half’s use and some thoughtless campers had not been too careful with their trash. How about getting some of the youngsters out to help clean it up? — That’s it! — we’ll schedule an Anti-liter Bug Hike!

Word is passed around the camp — 1 p.m. — for any youngster that wants to help. Seventeen show up and we go through less than half the camp and Ranger Dave’s Model A pickup is filled with rusty cans, paper and aluminum foil. A hot, dirty job.

"Gee, look, an ole car battery!" "Look at all this broken glass, that’s dangerous!" "Look, I found part of an old sink!" "Oooh, someone left a disposable diaper on that rock." "Let me take care of that," says Ranger Dave — who gingerly eliminates the eyesore.

Afterwards? Well, we’re hot, thirsty, and dirty — so a ride on the Model A to the store for a quick wash up, a welcome cool rootbeer and the awarding of a well earned Smokey the Bear badge.

It was fun — but more too — it was a valuable training session for a fine group of boys and girls. Training that they will pass on to their own children, — and to their parents too! Woe be to the father that thoughtlessly tosses a bit of trash out the car window!

Perhaps we can schedule another cleanup hike and finish the rest of the campground. Say — maybe we could even work in a Junior Ranger Program similar to the one offered in Yosemite Valley. Well, we tried it — and it worked out wonderfully! On the first nature hike we naturally saw many rocks, leading to a discussion on how Yosemite Valley was formed. Saw a cirque, the cradle of glaciers, and talked about how glaciers worked away at the Valley walls.

Next day a different tramping hike through meadows filled with "corn lilies", inspecting decayed logs in search of the lowly fungus. We

"What does this bird eat, Ranger Dave?"

—Bullard, NPS
Junior Rangers

It's Fun To Be One
puffed up a rocky ledge to an ancient knurled juniper loaded with staghorn lichen — and talked about algae. Descending our lofty hill we walked through deep forest with tall red fir and Jeffrey pine. Oh it is good to be a part of the forest and to feel the coolness of the shade! "Do you know where you’re going, Ranger Dave?" "What would you do if you got lost in the woods?" "What kind of pine cone is this big one here?" "Look, there’s some rose quartz!"

A wonderfully thrilling hike!

That afternoon we gathered at the campfire circle and went over the museum study skins brought up from the Valley. The cony, flying squirrel, pine marten, bat — and many more.

"Look at the teeth in that skull. What do you think this animal eats?" "He must eat meat. Look at the ‘canine’ teeth!" "How big is a bear when it is just born?" "Really? — only six ounces?" And on and on — The girls giggle and some shy away from the raccoon skull — but it’s a wonderful session. Then wash up, light the fire and roast fat marshmallows while we take our "exams" on rocks, plants, and animals.

Next day another cleanup hike — this time we finish the campground — it looks pretty clean! The youngsters are looking forward to next year and another "Junior Ranger" program. "Will there be one?" — "You bet there will!"

"It’s NOT slimy. It’s just like mommie’s purse!"

—Hubbard, NPS
Thursday July 21, 1960, 5:30 A.M.
Leaving Happy Isles Yosemite National Park Calif.

After mush huffing and puffing the top of Nevada falls was reached, and there lay before my father and I two heavy packs on our backs, supplies for 6 days, an open door to the great high country of the Sierras.

The first valley we came to was Little Yosemite. The elevation was 8,100, which meant the mosquitoes were very bad. Hiking threw Little Yosemite was much easier than the hike up to Nevada falls because it was a flat walk.

The twin bridges were so much alike I couldn't tell them apart. The first one we came to hadn't any water coming under it, but the second one had lots of water coming under it. We stopped for a drink and both of us complained we were getting hungry, so we decided that we would go up the trail a little ways to the next camp.

We ate lunch and headed out for Merced Lake.

When we reached Merced Lake, we met a troop of Boy Scouts that told us where the camp was. So we added on around the lake and found a nice camp. I wanted to stay but my father insisted that we move on and find a better one. We found a better one and decided we would stay here. When we set up camp I thought I would do some fishing, and didn't have any luck so I decided to come back because it was threatening rain.

Then we ate supper. When I was threw my father told me to get some fire wood. Later I spotted quite a bit across the river. I made it across allright, but when I came back, the branch I was depending upon broke, and half of my leg got wet. Anyway I came back and got dry. It was getting darker so I decided to go fishing again. Then I said my father could go fishing up stream. I caught one, and on the cast, I thought I would jump out to a log and didn't make it. This time I got wet waist high. Then my father came back with 3 fish so we could have enough for breakfast. We were tired so we went to bed. It sprinkled in the night but not enough to matter. The next morning we ate and packed our packs. Then we went over to the high Sierra camp and got some extra food. We headed for the ranger station but the ranger wasn't there so we went on to Washburn Lake.

When we reached the lake we met some people that was camping at the first camp we came to. They told us where a very nice camp was so we looked it over and thought we would stay there. In the meantime another backpacker found the camp while we went back to get our gear. We met each other and decided that we would stay together for 3 days. We camped by the inlet for the lake so we could have fresh water when ever we wanted it and could keep things cold.

Every day we would catch our limits in eastern brook trout. Sometimes we would catch a cross-breed of Rainbow and Eastern Brook. I was
very lucky to see a limit of goldens. The man who caught them went a couple of miles up Adair Creek. There was only one fish I didn’t see and that was a Brown. Altho I met a man who caught a 15 in. Brown out of Merced Lake.

The way you can tell an eastern brook is his large mouth, red spots on his sides, and reddish-orange fins margined in white.

The Golden has golden-yellow sides, scattered dark spots on top, and the tip of his fins are white.

The Rainbow has a small mouth, silvery sides and tiny scales, also the top of his body is dark green.

The Brown has a dark neck with dark spots, larger tward the back, and underneath is brownish-yellow.

We found quite a few flowers. In the wet areas we found the —

1. Sierra Rain Orchis — Orchis Family
2. Tiger Lily — Lily Family
3. Columbine — Buttercup Family
4. Larkspur — Buttercup Family
5. Wild Onion — Lily Family
6. Monkey Flower — Figwort Family

In the dry areas we found —

1. Pine drops — Heath Family
2. Yarrow — Buckwheat Family
3. Wyethia — Sunflower Family
4. Sierra Mariposa Lily — Lily Family
5. Indian Paint Brush — Castilleja Family

These are only a few of the flowers we saw.

One fascinating tree was the Jeffrey pine. It was a vanilla or cherry smell to it especially, when the sun has been hitting on it.

The wild life we saw was a yearling fawn, a doe, a garter snake, and a porkepine.

This time coming down the sunrise trail took us to half dome because we had planned climb it on our way back to the valley. When we came to the junction we ditched our packs and started up. It was about 3:30 when we started up and about 6:00 when we got down. We were going to take our packs and camp down at Nevada Falls because our friend left his pack there while he slept on half dome.

We reached Nevada Falls a 9:00 P.M. We were coming in by flash lights. When we got there we couldn’t find his camp so my father scouted around a little bit and found his camp, but we soon found out that a bear was not more than 20 ft. away from us. He had torn our friends pack all apart. He woke my father and I up 5 times in the night. When our friend came down from half dome the next morning we told him the story and started our hike down to the valley 3 miles away.