

To the top
of the Western angler's
world for the . . .

Golden Trout

RANDALL KAUFMANN

GOLDEN TROUT! Even the words conjure visions of brilliant fish in pristine alpine settings, probably unmatched anywhere on earth. Lakes strung between high canyons like azure-blue gems set in polished granite, others resting in cloverleaf clusters on the high, broad basins, with the highest waters hugging icy glacial headwalls.

These fragile timberline waters of the West are surrounded by flowery meadows interlaced with meandering creeks which seem to slip soundlessly to the brinks of great canyons. Many of the lakes here have evolved during the past 10,000 years. During this time the glaciers of the Pleistocene ice age have been receding to the highest north-facing headwalls, and all but disappearing from many areas. Their retreat has created an abundance of deep canyons and lonely glacial cirques. It is here, at elevations over 10,000 feet, where a home exists for *Salmo aguabonita*—the golden trout—meaning "trout of beautiful waters."

Historically, golden trout were originally found in the upper reaches of the Little Kern River, Golden Trout Creek and the South Fork of the Kern River, all in the south-central Sierra Mountains of California. Their ori-

RANDALL KAUFMANN is well known to many readers through his book, *The American Nymph Fly-Tying Manual*, and through his Oregon angling shop.

gin is still open to speculation; one theory holds that they evolved over the millennia from isolated rainbow trout.

Most ichthyologists recognize two types of golden, *S.a. aguabonita*, which is endemic to the South Fork of the Kern and Volcano Creek, and *S.a. whitei* from the Little Kern Drainage. The Little Kern is about 15 air-miles from the other golden waters and is separated by 4,000-foot-deep Kern Canyon. The main fork of the Kern River flows through this canyon and no golden trout were originally found in its upper drainage. It would seem unlikely that two separate types of golden

would evolve so close to one another. At one time they probably shared a common stream bottom, were separated by geologic forces, and were left to evolve separately. Today the two types are so closely related that the casual observer would notice little, if any, difference.

The earliest known transplants date back to the 1870's, when cattlemen carried goldens in coffee cans to streams close to their camps. In 1876, a Colonel Stevens carried 12 goldens from Mulky Creek over the Sierra crest via Mulky Pass and released them in Cottonwood Creek in the vicinity of Horseshoe Meadows. The Colo-

nel had a sawmill in the area, located 25 miles south of Lone Pine, and wished to enjoy some trout from time to time. As news of these beautiful fish spread, various sportsmen's groups began transplanting goldens into numerous watersheds. Fear spread that the original habitat would be destroyed by encroachment and overgrazing, so in 1909 the California Department of Fish and Game (DFG) entered the fish-stocking business.

In 1918, the DFG began to rear goldens in the Cottonwood Lakes. At an elevation of 11,000 feet, the Cottonwood Lakes are located a couple of miles north of Horseshoe Meadows at the base of 14,042-foot Mt.



Man and his equipment, at left, assume an awesome insignificance in California's High Sierras. Photo by the author.



A golden trout.

This and following photos by Jerry Balasek.

The Coloration of Golden Trout

THE BRILLIANT COLORS of the golden trout seem without parallel among freshwater fishes. Professor Peter B. Moyle, in *The Inland Fishes of California* (University of California Press, Los Angeles, Calif., 1976), notes that, although the colors may be more subdued in hatchery-kept or lake-planted goldens, those colors do have a genetic basis. A similar coloration has evolved independently in other rare Western species of *Salmo* such as the redband trout, Piute cutthroat trout, Gila trout, Apache trout and Mexican golden trout—all found in high mountain areas. Moyle offers two theories to explain this phenomenon.

The first theory suggests that the brilliant colors make the fish less visible to predators when viewed from above through clear water against a bottom of bright rust-colored volcanic rocks. But, although such a stream bottom occurs in the smaller streams of the upper Kern Basin, it does not occur consistently in many of the waters where brightly colored goldens are found. Also, predators are infrequent in the high elevations that are the restricted habitat of these trout.

The second theory is behavioral. Most stream-dwelling trout species at any altitude assume bright colors during spawning season. The brightest-colored males tend to be the most successful in defending their spawning areas and in attracting females. It is more advantageous to the preservation of the species for these trout to shed any natural camouflage in order to increase reproductive success. However, if the golden trout is indigenous to areas without any significant predators, the advantages of bright coloration could be retained when not breeding—the brightest colored fish would have the greatest success in defending feeding territory; he would grow faster, and hence increase reproductive success by virtue of larger size and, perhaps, earlier maturity. CRAIG WOODS

Langley. Here the DFG reared goldens to the fingerling stage and transplanted them by pack train into numerous lakes and streams to the north.

During the 1920's and 1930's, goldens were being distributed to a couple of hundred high-elevation lakes. Into the 1940's, these goldens thrived, virtually unmoled, high in the clouds of the then mostly unknown and rugged Sierra terrain; fantastic fishing was available for the few who hiked the high trails, and fish over five pounds were not uncommon. As fishing pressure grew, the DFG began to raise brook, rainbow and brown trout. Little forethought or research was given these new species. They were stocked in a haphazard manner throughout the Sierra waters, and soon an unknown potpourri existed. Brook trout crowded out the golden, browns freely ate their young and the rainbows interbred with them. Goldens cannot endure interference from man or other trout species, so the resulting effect was a marked decline in the golden population. Beginning in the 1940's surveys were taken to determine what species were where. Waters that contained mixtures of species, and which were suitable for goldens, were poisoned and restocked with golden trout. This practice was carried on into the early 1960's.

Stock from the Cottonwood Lakes was also being exported to other Western states and, by the late 1930's, Colorado, Wyoming, Montana, Idaho, Washington and Oregon had established golden trout populations. Attempts were made to establish goldens as far away as England. In 1939, the California legislature passed a law prohibiting the export of eggs and fish; in 1947, the golden trout was declared the state fish. Today, Wyoming, Montana, Idaho, and Washington still carry on a limited stocking program, while Colorado and Oregon have limited populations in some waters. Today nearly 85% of all golden trout waters are located in California, distributed primarily from Tioga Pass in Yosemite south 200 miles to the Kern Plateau.

The Cottonwood Lakes offered a fairly secluded habitat in which to rear goldens—until wider development and use of the area began in the 1960's. Matters were complicated when the Forest Service decided to build a road up the eastern Sierra escarpment to within a few miles of the Sierra crest and the Cottonwood Lakes. This was done, under protests from the DFG, the Sierra Club and other sports and conservation groups, in the hope of developing a ski resort in Horseshoe Meadows and to open up the area to the masses so they could enjoy a "gentle wilderness experience." The project has been labeled an engineering disaster; the outrageous scar is visible for 50 miles. The road now allows easy access to these golden waters, and during the summer season 50 or more automobiles may, at times, be found parked at the road's end.

As thousands of people crowded into the golden-trout area, the DFG recognized the problem of having only one egg-gathering location. A second basin was chosen and "egg-keeping" was set up at the Laurel Lakes near Mammoth. Word leaked out about large brood stock; poaching plus the killer winter of '69 led the DFG to abandon the Laurel Lakes project. Soon af-

Climbing Sierra peaks to reach goldens can be exhausting, as the expressions of these backpackers suggests.



ter, these lakes were opened to the public and some goldens over six pounds were taken there during the first legal seasons. Today there are few fish left and the hatchery lakes are once again seldom bothered. The DFG still gathers all its eggs at the Cottonwoods and transports them to the Mt. Whitney Fish Hatchery near Independence where they are raised to about one inch in length. In September, they are loaded into planes and air-dropped into the backcountry lakes.

AS A GENERAL RULE, golden trout seldom attain a length greater than 12 inches; most will measure much less—the fish in the Kern drainage average 5–7 inches. There are exceptions to these sizes, but the casual fisherman should not expect to find many larger. The largest golden ever recorded came from Cooks Lake, Wyoming, and weighed an astonishing 11 pounds. Cooks Lake has since been populated with mini-brookies, and the big goldens are history. Lake Virginia in the Sierra gave up a 9-pound, 14-ounce golden a few years back, but the DFG (reportedly in error) had air-dropped rainbows, and few pure golden trout are left. In time, the lake could come back to a good golden fishery, but it is hit pretty hard these days, with some fishermen spending the summer along its beautiful shore. On such waters, the ten-fish limit is far out-dated and camping should be severely regulated. Other once-good golden lakes in the Sierra have received air drops of rainbow. No one in the DFG wants to take the blame for such action, but responsibility lies either with official mismanagement or pilot error.

There is nothing inferior about the "rainbow-golden cross," as this hybrid is called, except that the pure golden strain itself should be kept pure. I have watched hybrid fish in excess of eight pounds cruising deep lake drop-offs. Many people believe these hybrids to be pure goldens, and several "golden" tales circulating

around campfires can be attributed to such fish. There are a few waters scattered throughout the Sierra and the Rockies that offer fishing for goldens in excess of two pounds, but the uninitiated angler-backpacker could wander over the high mountains for several summers without seeing such a fish. Be content to catch and release some prime specimens with pure markings, regardless of size.

THE WOULD-BE GOLDEN TROUT FISHERMAN should be in good physical condition, have quality gear, and have a thorough knowledge of mountain survival. Trails are usually long and steep, with several thousand vertical feet separating you and the goldens. Waters will only be ice-free for 3–4 months a year. Freezing temperatures and snowstorms are common even in July and August. This type of arctic weather can be severe, with frequent storms and high winds. Hypothermia, the lowering of the body temperature, is a constant and sometimes lethal threat. I have encountered violent electrical storms which descend in minutes to unleash giant hailstones, sleet and freezing rain. Add to this the deafening sound of thunder and the sulphurous smell of lightning only yards away and one can face a precarious situation on a 13,000-foot pass. There is no shelter and one is soon dripping wet and chilled to the bone. On the other hand, I have seen the heat and light so intense above the timberline that the shade of a large boulder was a welcome relief. Don't underestimate the high mountains—be prepared for anything.

Golden trout are my favorite fish and I have spent a great deal of time exploring their waters. A trip that Larry Pierce and I took last summer is typical. Our tackle included 8½-foot graphite rods, a full range of 6-weight fly lines, 7½-foot leaders tapered to 5–7x and about 40 dozen flies. Over the years I have settled on the following patterns as being the most consistent



golden-enticers. I tie these on barbless hooks, both weighted and unweighted, in a wide variety of sizes.

Timberline, #12-18
Black Caddis Emerger, #12-18
Timberline Emerger, #10-14
Scud, assorted colors, #10-18
Trout Shrimp, #12-16
Randall's Caddis dry, assorted colors, #12-18
Randall's Caddis nymph, assorted colors, #12-16
Green Mt. Damsel, #8-12
Red Tail Mosquito, #10-18
Emergent Mosquito, #14-16
Humpty, all colors, #16-20

We eased out of June Lake, a quaint Sierra resort tucked into a beautiful east-slope lake basin, and turned south at the junction of Highway 395. Traffic was light and we gazed at the fluffy cumulus clouds drifting over the mostly barren 12,000-foot summits rising to the west. The air was warm on the east-slope desert, and the lingering snow patches above 4,000 feet looked inviting.

I had two reasons for this particular high-mountain adventure. Bill Bohannon and I were researching a fishing guide-book for the Sierra and we needed some additional information on the area Larry and I planned to visit. I also wanted to try for some of the larger-than-average goldens that I knew inhabited this area. Larry had been accompanying me on previous research trips, and the excellent "peak-bagging" offered in this area, along with the outstanding scenery, tempted him to join me for the ten-day backpack. We soon turned west off 395 and followed a narrow spur road, first through dried-out sagebrush flats and later up steep switchbacks into cooling groves of aspen. Finally, we pulled alongside the "wilderness entry station," advised the pretty rangerette of our itinerary (hinting there was enough food for one more), and then received our permit.

In the Sierra backcountry, and in many other wilderness areas, a reservation system has been established to limit and disperse the number of backcountry travelers. This intensity of visitor-use points to the urgent need for more wild areas, certainly not less. Wilderness rangers patrol many areas in an effort to control environmental abuse. Uneducated campers cut green trees, build fire pit after fire pit, burn up often-times scant wood supplies, kill fish, pollute water, and leave unwanted gear and food containers behind to rust for years, if they'll rust at all. The Forest and the Park services are trying to fight such ignorance, but progress is slow. Remember, if you packed it in *full*, you can pack it out *empty*. The number-one rule of the mountains, or anywhere for that matter, is "take only pictures—leave only footprints."

We parked at the end of the road and began sorting through our gear. The cool freshness of evening drifted down the canyon as we shouldered our packs and began the steep ascent to our first campsite four miles away. On reaching our destination that evening, we set up a leisurely lake-side camp amid 2,000-foot crags and settled down to a juicy steak—while the brook trout next door dined on caddis.



We spent the greater part of the next morning climbing to the summit of the 13,000-foot pass. The air was thin and we stopped often to inhale and rest. Once on top we were able to look *down* on all but the highest of the Sierra peaks. Below and beyond us stretched an uneven basin hiding dozens of lakes, all backdropped with a jagged range of seldom-visited peaks, canyons and golden waters. Larry decided to climb a high peak, and I hurried down the trail to the first lake to do battle with the goldens. Instead of goldens, I found an army of starving mosquitos and a seemingly barren lake.

Most of these high lakes look totally devoid of any life at all. Lake bottoms are rocky and sterile-looking; the water is often below 45 degrees. A closer inspection will reveal a multitude of tiny organisms, as well as small caddis, mayflies, scuds, shrimp and an occasional damsel nymph. It is these insects that make up the bulk of a golden's diet. Terrestrials are eagerly taken when available, and small golden fry fall prey to larger fish. I spent a frustrating two hours fishing before Larry met me at the outlet and we decided to cross a low divide and camp in the next basin.

On top of the divide we met a wilderness ranger and the conversation quickly turned to golden trout. He mentioned there is talk among Park Service people to protect fish as other wildlife is protected. I asked about the National Park policy of phasing out the fish-planting program, and we all agreed that golden trout would become quite scarce in many drainages as a result.

While there are many waters now containing goldens, most of these are dependent on occasional air-plants of small fish to sustain the fishery. This need arises out of inadequate spawning, excessive fishing pressure, or both. Goldens spawn during or just after ice-out and require fast-running water over gravel to reproduce successfully. Most of these granitic waters do not offer this combination, so without planting, many waters would eventually become barren in the Sequoia-Kings Canyon and Yosemite National Parks. The Park Service reasoning behind this is that anything not indigenous to the area doesn't belong. The obvious flaw in such reasoning is that it can be carried all the way to the Park Service employees themselves. Where do we draw the line?

WE PARTED COMPANY with the ranger and descended to a bleak lake at close to 12,000-feet. Not a tree or willow was in sight, just tundra, granite, snow and, hopefully, golden trout! I rigged up immediately and placed my first cast over a likely looking drop-off. I counted to ten and had begun a slow, inching retrieve when the unmistakable take of a good fish startled my wandering senses to reality. He fought like a baby steelhead, finally bringing the battle to the surface. I gently unhooked the two-pounder and quickly released it in the shallows where I could admire its unbelievable colors. It had an over-all golden appearance with an olive back; a bright-red strip extending from tail to cheek; a brilliant-red underneath, except for the very bottom which was

pink; white-tipped dorsal and anal fins, edged with black; and distinct black spots along the back and tail. The 8-10 black parr markings characteristic of stream goldens are usually missing from lake specimens.

The brilliant color of goldens begins to fade immediately when they are removed from the water, so extra care must be exercised in releasing these fragile trout. I recommend using barbless hooks and releasing all fish immediately. If they must be handled, do so quickly and very gently.

Darkness was approaching quickly as I moved around the lake while casting a Black Caddis Emerger pattern to likely looking spots. About every ten minutes, I would have a jarring strike that would break me

A Golden Trout Wilderness

The future of golden trout depends partly on pending legislation to protect the original stock. Sen. Alan Cranston of California introduced "The Golden Trout Wilderness" bill before Congress on January 10, 1977. This bill designates certain areas in the Sequoia and Inyo National Forests as "Golden Trout Wilderness" areas.

Those wishing to voice support, or to learn about these areas, should write Sen. Alan Cranston, Room 452 Russell Senate Office Building, U.S. Senate, Washington, D.C. 20510, or the Committee on Energy and Natural Resources, Subcommittee on Parks and Recreation, 3106 Dirksen Senate Office Building, U.S. Senate, Washington, D.C. 20510.

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off immediately. As the sky slid from purple to black, I switched from a 5x to a 3x leader, but even under the cover of darkness, I couldn't entice another strike. Big goldens are extremely leader-shy and I had to be content with only strikes!

I heard the unmistakable cry of "cheese cake" echo across the still waters; Larry was back in camp. I stumbled into camp muttering to myself about the ghostly goldens and Larry thought I was a victim of the lofty altitude. While I warmed up in my down sleeping bag from the 35-degree weather, Larry related the same story of broken leaders.

We explored a dozen other lakes the following week but did not locate any big goldens like those of that night. We also ran into some very strong winds for five days and this severely curtailed our fishing.

OUR LAST NIGHT WAS SO WINDY that I didn't bother to rig up. Larry fished in front of the tent for half an hour. Suddenly I saw his rod bend double. At the same instant, the biggest golden we had seen during the entire trip shot out of the water and fell back across Larry's light leader. Dejected but still smiling, Larry and I sat down to a meal of stroganoff and chocolate cream pie.

Later, under a canopy of brilliant stars such as one only sees in the high mountains, we sipped cognac and reminisced about the 20-inch golden of earlier that evening. We had spent a fantastic ten days amid the high peaks and weren't looking forward to the lowlands. ➔

Unique Southern Vermont Property For Outdoor-Oriented Family

This sprawling 2,000-square-foot main house and spacious guest house defied being photographed in summer because they're so delightfully protected by trees and shrubbery on all sides. Vaulted hexagonal 35-foot living room with central fireplace and library alcove behind it; modern kitchen; wings stretch out on two sides with two bedrooms in each wing; two baths; electric heat; full snow-plowing services.

Two-storey guest house near main house; four rooms nicely paneled in fruitwood or Vermont barnboard; one bath. Heated 50-foot swimming pool in beautifully landscaped yard. Remainder of this protected 2.6 acre tract is woods and paths leading down to a mountain trout stream (and grouse shooting) about 300 yards away.

Property is located in two-century-old Vermont village of Dorset, Vermont's most desirable homesite; about 300 yards from America's oldest nine-hole golf course; one mile from the village store and post office. Dorset is located just six level miles north of Manchester, Vermont, the old-line resort town with some of New England's finest restaurants and shops. The West Branch of the Battenkill begins in Dorset, flows through Manchester, then down to Arlington, Vermont, and westward to the nearby New York State line. The productive Mettawee River flows behind the house and then follows the highway north of Dorset, turning into a full-scale trout stream as it moves on.

This is a most unusual property — and realistically priced. For further details contact our authorized representative:

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