

Catching More and Bigger Fish on Pyramid Lake

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Know your quarry: The Biology and Behavior of Pyramid Lake Lahontan Cutthroat Trout

Anyone who fishes Pyramid regularly will tell you that fishing for cutthroat at Nevada's Desert Lake has been phenomenal this season (2004). Both the numbers and average size of the fish being caught have been increasing over the past several years according to creel census data collected by the Paiute tribe's Pyramid Lake Fisheries. The outstanding fishing is the result of excellent management practices by the Fisheries folks and very successful tui-chub reproduction over the last 2 summers. The trout have been gorging on chubs and many are shaped like footballs. The average size fish tend toward the upper end of the 19"-24" slot where all fish must be released to maintain a healthy brood stock. Two fish between 16" and 19" over 24" can be kept per day, but only one may be over 24". Nearly 7% of the legal fish have been larger than 24" during October. The overall catch rate is approximately one fish per hour per rod from both boat and shore. Catches of more than 50 fish per day per boat are typical for fishermen with some knowledge of the lake.

Lahontan cutthroat trout exhibit pronounced sexual dimorphism. The males and females have different body forms and coloration. This is most obvious prior to and during the spring spawning season. Sexually mature fish typically lose their bright coloration just after the spawning season and go into an eclipse phase in the summer and fall. However this fall, many large brightly colored fish are being caught. Many of these fish did not become sexually mature last spring. This is good news for the future, since fish that delay sexual maturity grow larger.

Because of its large size and depth, desert terrain, and dramatic Tufa rock structures that are relics of ancient Lake Lahontan, Pyramid Lake can be intimidating for anglers fishing there for the first time. Since there are virtually no trees and only one permanent inlet stream (the Truckee River), Pyramid just doesn't look like a Sierra or a foothill lake. Since Pyramid becomes highly stratified during the warm months, the bait fish and insects have a temporary refuge from foraging trout in the warm surface and near shore waters. As the water begins to cool in the fall, the trout begin to make forays into the surface zone and shallow inshore waters to feed actively. Understanding the daily and seasonal movements of the prey items the trout feed upon as well as the behavior and temperature preferences of the trout is the key to regularly catching large numbers of fish at Pyramid.

Stratification

Pyramid Lake is a highly productive body of water that undergoes thermal stratification over the summer. Most of the productivity takes place in the warmer surface layer, which is called the Epilimnion. This layer contains a large concentration of photosynthetic organisms including green algae, blue-green algae, and yellowish microorganisms known as diatoms. These organisms cycle with the seasons and give the lake its distinctive turquoise coloration. They also provide food for abundant zooplankton, which are the major food source of for baitfish and other forage. Tui-chubs are by far the most abundant baitfish. There are two subspecies of chubs in the lake. One type lives primarily in the water column and the other is found near the bottom.

The greatest amount of food is found in the near-shore Littoral Zone. Here, anchored water plants provide habitat for insects. Midges (blood worms) are very abundant and attract the bottom dwelling form of tui-chub, which feed on the midge larvae.

Trout spend most of the summer in the Thermocline, the region of the water column where the temperature drops rapidly as the water gets deeper. There are relatively few fish found below the Thermocline in the Hypolimnion because of a lack of food and oxygen. It is common to see Pyramid trout

suspended over water as deep as 300 ft or more, but they are rarely found at depths greater than 150 ft. Trout move between the cool depths and the food rich shallows where ever the two zones are closest together such as points, drop offs, and the Tufa walls on the East and North sides of the lake.

What Do Pyramid Trout Eat?

- Tui-chubs, Tui-chubs, Tui-chubs!!! (green/white, chartreuse/white, army truck)
- Cui-ui and Tahoe suckers (green)
- Dragon fly nymphs, damsel fly nymphs (green)
- Leeches (black and purple)
- Smaller trout (rainbow or brown trout pattern)
- Scuds and midges (green, orange, red)

All of these prey species except for the Cui-ui and suckers prefer warmer temperatures than the trout. Green is obviously the primary lure color for the lake.

Both forms of tui-chubs appear olive green when viewed from above. This makes them hard for the trout to see against algae covered bottom areas. When viewed from below, they appear white or silver, making them hard to spot against the surface of the water.

Olive or green lures with a white or light green side or bottom are good chub imitations. A frog pattern Apex is a good example. One of the best all around Pyramid lure for any light condition is a flo/glow green Coyote spoon. This lure is light green and white on one side and silver on the other. Other lures will out-fish the flo/glow under certain conditions, but this pattern always seems to catch fish.

When illuminated from the side, tui-chubs have a distinct yellow or chartreuse stripe. This may explain why lures with a light green or chartreuse stripe are so effective on bright sunny afternoons. A Mongoose Coyote spoon is a good example of this type of pattern.

When viewed from the rear, the yellow stripe appears orange or red. This may explain why green and white lures with an orange or red stripe are so effective. Army truck Coyotes and StingKings or Watermelon Apexes are good examples.

Temperatures and Trout

- Trout prefer temperatures between 50 and 58(f).
- They grow fastest at 64(f).
- Temperatures greater than 64(f) are stressful. They stop growing at 72(f) and 77(f) is lethal within a few hr.
- Trout avoid high temperatures, but when hungry, they will enter warm water for short periods of time in order to feed.
- They hold in deeper cool water and move into warmer water during optimal feeding periods until the surface of the lake cools down in the fall.
- Optimal feed periods correspond to the times that their prey is most active and distracted by feeding.

Targeting Actively Feeding Fish

- Pyramid LCT feed actively in the Epilimnion and Littoral Zone when temperatures allow (top 5 - 20 ft). There is rarely any reason to fish any deeper.
- They hold in the Thermocline at temperatures between 50-56(f) when not feeding.
- "Staging": Gradual movement up to shallow depths to allow swim bladder adaptation.
- "Retreat": Gradual movement to deeper water after a feeding period.

When Does the Bite Turn On?

- Low light (Dawn and Dusk).

- Solunar periods during the day (with stable weather).
- The beginning of a storm.
- Anytime when prey is very abundant and temperatures allow the trout to enter shallow areas that contains prey.
- When the surface temperature is between 52-58(f), fish feed all day long with a hot bite during the solunar periods.
- Staging fish are often difficult to catch, but are less discriminating.
- Staging fish start to bite well as soon as they enter shallow water.
- Staging fish become more selective as the feeding period progresses.
- Retreating fish will feed actively all the way down to deep water (70 - 100 ft).
- Fish can always be caught by trolling deep (70-100 ft), but most of the fish will die after release. Please don't target the fish you see holding in deep water.

Targeting Big Fish

- Large fish (30"+, 10 lb class) rarely leave the optimal temperature range of 52-56(f) until the lake cools down.
- They seem to be solitary ambush predators and tend to stay close to the bottom, breaks, and cover.
- Big lures = big fish, except when they come close to shore looking for dragon fly nymphs.
- Troll close to the bottom and target the breaks and rocks.
- In the winter, troll slow and use lower speed lures such as Flatfish and StingKings.

Pyramid Trolling Tactics

- Follow the breaks on the West side. Troll with an "S" pattern from close in out to 100-150 ft. There is a break at about 20 ft that defines a shallow shelf along most of the West shore.
- LCT do not school up until the spring pre-spawn. But they congregate wherever prey is abundant. So fish where they are, not where they ain't. Concentrate on the depths where you catch fish.
- Change speeds to draw strikes.
- When the fish move up onto the shelf, set your downriggers shallow (6 - 12 ft) or ½ oz banana weights 5-6 ft in front of your lures without downriggers. Un-weighted diving plugs also will work very well.
- Troll with an exaggerated "S" pattern along the East side rock walls. The trout are often found chasing small bait pods suspended over deep water.
- Try close to the shoreline in East side bays that drop off rapidly.

A Few More Tips

- Start with darker lures in the morning and use brighter colors as the day lightens up. Dark green/frog, watermelon/army truck, chartreuse/rainbow patterns. Reverse the progression as the sun drops in the afternoon.
- The trout are very rock wall oriented early in the season, but move more to the bays as the water temperature drops. Cool temperatures let them get at the chubs that had a thermal refuge in shallow water during the summer.
- Use lures with single hooks and 12 - 25 lb leaders. Release the fish at the side of the boat using pliers or a hemostat. Survival is much better if you don't use a net or try to bring fish into the boat.

Pyramid Lake is a very special place and the fishing is spectacular right now. But please respect the fish and conserve the resource. On days when the fishing is really hot, set a reasonable C&R limit for yourself. Remember that approximately 10% of the fish you release are not going to survive no matter how careful you are.

Pyramid may be the best trout fishing in the West. So plan a trip out to the Desert Lake to experience this amazingly successful fishery.