

GPFF - Smith River, 7-11 July 2023 (Fri-Tues) - Fishmaster Rich Miller (h) 510-525-8006, (home email) rich@ski.org. (Updated 01/10/2023)

RENDEZVOUS AND CAMPING

Friday night, Grassy Flat Campground(N41.855243°, W123.890964), Campsite #19, Six Rivers National Forest, 19mi NE of Crescent City on US-199. Reservation Confirmation #0538296872-1. About 6.7 hrs (375 mi) from Berkeley. Take US-101 to Crescent City (Grants Pass exit). Bear right onto Rt. 199 and go 18.8 mi. to campground sign. Turn right and go 0.1 mi. to campground on left. Elevation 500'. **GPFF strongly encourages carpooling. Email to coordinate rides.** For people who would rather not camp, there are motels in Crescent City and Hiouchi.

MAPS, BOOKS, ETC

Here is the [Google Map](#) link. The Smith drainage is included in the hardcopy US Forest Service [Six Rivers Map](#). There is a Streamtime fishing map of the steelhead reaches of the Smith and Chetco Rivers. You can download Rich's annotatable PDF Smith River Steelhead Fly Fishing maps [here](#).

REPORTS, ONLINE GUIDES AND GENERAL INFORMATION

[Perfect Fly](#) has a modest description of the river and invites a call for specific fly recommendations. I did call. See the section "Hatches" below. You can call the US Forest Service in Gasquet (707) 457-3131 or Lunker Fish Trips (707) 458-4704 for river conditions and advice. [Middle Fork Ranch\(??\)](#) is a fishing resort just above the town of Gasquet (*may be sold*). Rock Creek Ranch on the South Fork is referenced by the Smith River Alliance, but I was not able to find out anything about it online.

Much information is available from the Smith River Alliance. Here are the [Anadromous Fish Action Plan from 2002](#) and the [2016 Estuary Restoration Plan](#). And a much more aggressive piece by the [Siskiyou Land Conservancy](#).

WATERS AND FLOWS

Click to see the [mainstem flow at Hiouchi](#). Historically, the average flow 8-12 July was 525 cfs, *and last year it was 325*. We are expecting water in only the most central channels. DreamFlows estimates the South Fork, Middle Fork, and North Forks to contribute about 60, 20, and 20 percent respectively to the mainstem flow. The Smith, which is undammed and runs largely through bedrock, famously clears very quickly after a rainstorm.

Steelhead Reaches - The access and fishing locations are copiously detailed on the fishing maps mentioned above.

Estuary - Brackish tidal waters, numerous sloughs, mostly fished from drift boats, but accessible by gravel bars at a couple of locations below US-101.

Mainstem above estuary and below junction of Middle and South Forks at Hiouchi - Much of this water lies within the [Jedediah Smith Redwoods State Park](#) and along US-199. It comprises long, textured runs accessible from extensive gravel bars. **Mill Creek** joins the mainstem from the south where US-199 meets Howland Hills Rd.



Middle Fork (steelhead to Patrick Creek) - US-199 runs along the MF to mile post 30.12, most of the way to the Oregon border. At MP 30.12, Knopki Creek Road (18N07) departs 199 to the east and follows the MF a couple of miles further. The road continues along Knopki Creek. The MF above Knopki junction is a Wild River, and there is no road or trail access. Besides these streams, the Siskiyou Fork, Little Jones Creek and Patrick Creek are the only tributaries of the MF with close road access. Along most of its course, the MF runs through deeply carved bedrock, with only occasional small gravel bars. There is access at each of the campgrounds on 199 as well as at several pullouts and bridge crossings. There is nice fishing on the MF at the junction of Little Jones, and easy-to-use water just above the first bridge above Patrick Creek.

Patrick Creek - Access from County-316, which closely follows the creek to the junction of the east and west forks, and then follows the east fork into Oregon. It is a small creek.

Little Jones Creek - At MP 24.85, take FR 17N05 about a mile to FR 17N08 (Little Jones Creek Rd). Follow it for about 3.5 mi to where it meets Little Jones Creek. The creek is a lovely small forest stream, low gradient with shallow riffles and small pools. The resident fish, unlike most of the other waters, are cutthroats.

Siskiyou Fork - Accessible from 17N01 via a small side road to a pickup campground just before the 1st bridge over the fork. Moderate sized low gradient stream, pools and riffles.

Upper MF and Knopki Creek - Accessible from 18N07 at the bridges. Quite small wooded streams.

North Fork (steelhead to Stoney Creek) - A Wild River, with only a small length of trail access just above its confluence with the MF. Near the trail the NF is large and fast with steep rock walls. The trail ends at the mouth of Stoney Creek. There is multi-day rafting access for the NF far upstream at the crossing of county 305, just below the Oregon border.

Stoney Creek - Starting with its confluence with the NF, a most beautiful stream, stunningly clear water with chutes and pools cut deep into the bedrock. With low summer flows it is not hard to work your way up a mile or so to where the valley widens somewhat and the gradient lessens. From the Stoney Creek trailhead, a good trail contours about 0.5 mi through the National Forest above the left bank of the NF, finally descending to a piece of public-use conservatory land surrounding the lower part of Stoney Creek. Although a trail leads to the right above the left bank of the creek, it becomes less and less obvious, and eventually peters out before reaching a large slide. It is best to avoid this trail and simply work your way down to the creek at its mouth following a well worn route, then up along the creek bed.

South Fork (steelhead to Jones Creek) - Accessible from County-427 which leaves US-199 to the east just above Hiouchi and crosses bridges over the MF and SF. The initial portion of 427, to Craig Creek, runs above the Canyon Section of the SF, which is serious white water and closed to fishing all year. Above Craig Creek, the road generally stays close to the SF and provides good access at a number of locations as far as Hurdygurdy Creek. Even more than the MF, the SF cuts deeply through bedrock. The tributaries with road or trail access are Hurdygurdy Creek and **Canthook Creek** via the Historic Kelsey West trail from the Low Water Crossing. Near Jones Creek, the SF runs through private land. However, if you follow County-15 south to FR 15N39 you get to the South Kelsey Trailhead, from which the [trail](#) ascends along the **Upper Middle Fork**, past **Buck Creek** and **Eightmile Creek** to **Harrington Creek**. From the trailhead, the trail contours, sometimes spectacularly, far above the river for about 2 mi. It then drops down to the Buck Creek Cabin, located at the mouth of Buck Creek. The SF and Buck Creek near the cabin offers excellent pool and pocket fishing. One can then fish the SF upstream for at least 3 mi where it is possible to rejoin the trail for the return walk.

Hurdygurdy Creek - Access from County-405 from Big Flat, just past the lower Hurdygurdy Bridge. From 427 take the left turn onto the gravel, northbound branch of 405 (sign to the Big Flat CG, 1/4 mi). Hurdygurdy is a lovely modest-sized (a bit larger than Patrick), shallow-gradient creek, comprising pools and shallow pocket water, winding through wooded bottomland. It is accessible from the CG and from a number of side roads turning left off 405N (including the turn into the Chimney Picnic Area) up to the at the upper Hurdygurdy Bridge. There is immediate access at the bridge (fish both downstream and up), and also from the next right turn above the bridge (short trail down to an improbable picnic table). Generally you can work your way along the creek as you will.

HATCHES

Perfect Fly recommended all the usual summer suspects: PMD's, Spotted and Green Sedges, Little Yellow Stoneflies (size 14), Mahogany Duns, and terrestrials: ants, beetles, hoppers.

PALE MORNING DUN (*Ephemerella*, smooth crawler, **7-9mm**). Nymphs live among rocks and debris in riffles, runs and flats that have moderate water flows. Nymphs are available if they come free any time of the day, during concentrated behavioural drift in the evenings, and during heightened activity, including swimming, before a hatch (**tiny light olive brown Bird's Nest**). The nymphs, like many other *Ephemerellidae*, sometimes engage in up and down "practice runs" exposing the them to trout during extended pre-hatch periods. During emergence, fish the

nymph as a dropper below a cripple (**pale yellow to olive tan Shucked Cripple**), whose husk makes it a bit more supporting, and useful in its own right. The duns are classic surface emergers with long sedate floats in optimal weather (**pale yellow to olive tan parachute dun**). Duns have been reported to emerge subsurface in faster flows. Despite name, hatches any time the weather is temperate. Spinners return to the water within 2 days of emergence. Females often, but not always, drop their eggs from the air above the stream, preferably into riffles. Some females end up on the water with egg sacs still attached. These females are often active and far from spent. True spent spinners usually cause the most feeding activity (**brownish red spinner, eg Trusty Rusty**). Though often seen in the late PM, mid-AM spinner falls have achieved legendary status at many locations.

SPOTTED SEDGE (*Hydropsyche*, net-spinning caddis, **10-15mm**, also **LITTLE SISTER SEDGE**, *Cheumatopsyche*, **a bit smaller**, but otherwise very similar). Shallow, moderate to fast riffles and runs in most trout streams, large populations in plankton-rich waters. Pherates emerge late PM *en masse* (**yellow, tan, brown Sparkle Caddis, EC Caddis**). Before emerging, *Hydropsychidae* pherates drift along the bottom or just under the surface, sometimes for hours. They then take unusually long to struggle out through the film. Adults oviposit late PM on the bottom in riffles or runs by diving, or possibly on the surface by dipping (**olive Deer Hair Caddis, Lead Wing Coachman, Missing Link**).

GREEN SEDGE (*Rhyacophila*, free-living caddis, **8-16mm**, R. grandis **30mm**). Fast riffles in cold free-stone streams. Pherates emerge PM sporadically from riffles or slow water below by swimming quickly up to emerge on the surface (**olive Sparkle Pupa, soft hackle, EC Caddis**). Adults oviposit PM in riffles or runs by diving or crawling below the surface (**olive Deer Hair Caddis, dark Diving Caddis, Missing Link**). When they're done, they let go and dead-drift, floating slowly to the surface.

LITTLE YELLOW SALLY (*Isoperla*, **7-16mm**). High elevation cold-water streams with rocky bottoms and fast currents. Naturals are yellow with dark brown vermiculations. Mature nymphs migrate toward shore, where they crawl out at night and emerge as adults. During migration, fish the banks with slow, shoreward swings (**Mercer's Little Yellow Stonefly Nymph**). Adults mate in stream-side vegetation. They become available again when they wriggle on the surface during oviposition, and when spent (**Clark's Little Yellow Stonefly**).

MAHOGANY DUN (*Paraleptophlebia*, crawler mayfly, **7-11mm**). Nymphs are 3-tailed, with fine, feathery 2-pronged black gills, tusk-bearing in some species, look like small, olive or brown *ephemera* (**brown or olive Hare's Ear, Birds Nest**). Like other Leptophlebiidae, early instars live in faster water, but mature ones inhabit and emerge in placid waters with leafy debris. However, *Paraleptophlebia* are more tolerant of faster water, and often found in pockets in riffles as well as moderate runs. Typically migrate to slow shallows to emerge, either by crawling onto the bank or through the film. Fish by swinging nymphs from slow water in to the bank, or with with long, dead-drifted dun imitations (**dark red-brown parachute or catskill**). Males emerge first, and mate as soon as the females come out. Females oviposit immediately, making repeated short dives to touch the surface. Imitate spent spinners with a **Rusty Spinner** pattern.

LARGE SWIMMERS (The Smith is said to be home to these bugs. They are high-summer emergers.)

The large swimmers all emerge by swimming to the softer margins and crawling onto the bank before eclosing. Thus they leave discarded shucks just above the waterline on stones, logs, and the like. Look for these shucks as confirming evidence of identification. You can fish ovipositor imitations in riffles above where you find the shucks, and spent spinners in softer water and eddies below. However, since the emergences of these mayflies in a particular stretch of water also tends to be spread out over weeks if not months, you should continue to fish the nymphs at the indicated times of day as well as the spinners.

SLATE DRAKE (*Isonychia velma*, **14-18mm**). **Dun wings are dark gray**. In shallow textured riffles. Early evening spinner flights 2-4 days after emergence, after which females fly upstream and deposit eggs by hovering over the film while repeatedly dipping the abdomen tip. A few females have been observed to release the complete egg sack from several feet above the water. Spinner wings hyaline with obvious red-brown veins, yellow costal patches, reddish-brown tint along the fore LE and brown tint along the hind TE. Dun body gray, forelegs red-brown, other legs yellow with red-brown regions, tails yellow with red-brown near anus. Spinner body is a more intense red-brown overall, but repeats, again more intensely, the legs bicolor configuration of the dun.

GRAY DRAKE (*Siphonurus occidentalis*, **12-16mm**). Wings slender and plain and show no venations in dun, hind wing has rounded costal projection. Male duns and spinners have pale band across the middle of the eye, gray to olive-gray body, often with zigzag pattern of dark markings on the dorsal abdomen, wings slate, almost dark gray, spinners have hyaline wings with obvious red-brown veins, reddish-brown tint along the forewing LE, but untinted, very clear hind wing showing almost no veins, dark gray body with reddish intersegmental rings.

OUR FISHING EXPERIENCE

(Ed Beggs and Rich Miller, late June 2018) - We caught a very large number of small rainbow trout, up to 8-9", most places we tried, and especially in the last two hours before dark, when the strikes were almost comically frequent.

During the day, things were slow on the forks, so we fished the creeks and the upper SF. We would have like to try the upper MF, but didn't get around to it. Mostly we fished small dries, yellow or brown, but a modest sized orange stimulator worked too. A few fish were caught swinging an olive woolly bugger. Generally, even in the evening, there were not a lot of bugs in the air nor many rising fish. We did see emerging yellow duns, ovipositing small yellow sallies, a few larger, but still smallish, orange stoneflies. Lots of vegetable cased caddis larvae in the water.

We didn't catch any cutthroat, but heard of a few caught on the upper SF on gold spinners. But, both Ed and I had the following experience (in the same place, and a few minutes apart): we pulled in a 6" trout, and when it was a few feet away, it suddenly went crazy in response to a much larger, more silvery, trout chasing in circles around it. The small fish on the line escaped by turning more tightly, and finally by us pulling it out of the water.

We fished one lower stretch on Patrick Creek, the pool on the MF at Jones Creek, Upper SF at Buck Cabin, the SF at Stevens Bridge (access left bank under bridge onto gravel bar), the MF at the raft launch on the SF road just beyond the MF bridge, the SF at Sand Camp, left bank at Lower Twin Bridge, MF at Grassy Flat (evening, upper pool especially, but also head and tailout of lower pool), Hurdygurdy Creek (esp upper bridge and next road upstream), and (evening), head of pool at Sand Camp.

(Rich Miller, Early July, 2022) - Fished the small tributaries of the middle fork and the middle fork at Grassy Flat and a little in the canyon area just above Patrick Creek. The streams were well inside their banks, so access was easy. Lots of small fish, with a few to 9", all rainbow, with the possible exception of a few salmon fry, and on Little Jones Creek, all cutthroat.

REGULATIONS

Statewide Trout Regulations

5.85. TROUT.

As used in this section, daily bag and possession limits, unless otherwise noted, mean the total number of trout in combination, including but not limited to rainbow, golden, brown, and cutthroat.

(a) General Statewide Regulations:

(1) All inland lakes and reservoirs; and ponds entirely on private lands, except those listed in Section 7.50(b), are open to fishing all year with a five-trout daily bag limit, and 10 trout possession limit.

(2) All inland streams, rivers, and canals, except those listed in Section 7.50(b), are open to fishing from the last Sat. in Apr. through Nov. 15, with a five trout daily bag limit, and ten trout possession limit, with no gear restrictions. From Nov. 16 through the Fri. preceding the last Sat. in Apr., a zero trout bag limit applies, and only artificial lures with barbless hooks may be used. In waters where the bag limit for trout is zero, trout must be released unharmed, and should not be removed from the water.

(3) Exceptions:

(A) All waters in Section 7.50(b), Alphabetical List of Trout Waters with Special Fishing Regulations, are those having regulations different from the General Statewide Regulations for trout.

(B) Brook Trout bag and possession limits may be taken in addition to the statewide trout daily bag and possession limits. See Section 5.84.

5.84. BROOK TROUT.

(a) Open season: All year.

(b) Limit: Ten.

(c) Size limit: Less than 10 inches total length.

(d) Brook Trout bag limits may be taken in addition to the statewide trout daily bag and possession limits specified in Section 5.85.

(1) Exceptions:

(A) Red Lake in Alpine Co.

(B) All waters in Section 7.50(b), Alphabetical List of Trout Waters with Special Fishing Regulations.

7.00(a) North Coast District

(2) All anadromous waters tributary to Humboldt Bay, and north of Humboldt Bay, except those of the Klamath and Trinity River systems and those listed by name in the Special Regulations. Fourth Saturday in May through Oct. 31. Only artificial lures with barbless hooks may be used. 2 hatchery trout or hatchery steelhead*
4 hatchery trout or hatchery steelhead* in possession. Closed to the take of salmon.

Special Regulations (7.40(b) Anadromous waters

Mainstem from mouth to junction of South and Middle Forks, South Fork to Jones Creek (except Canyon Area), Middle Fork to Patrick Creek, North Fork to Stony Creek

Open 4th Saturday in May through Apr 30; only artificial lures with barbless hooks may be used from the 4th Saturday in May through Aug 31; only barbless hooks may be used from Sept 1 through Apr 30. 2 hatchery trout or hatchery steelhead.**, 4 hatchery trout or hatchery steelhead** in possession, 2 cutthroat trout: minimum size limit 10 inches total length, 1 Chinook salmon and no more than 5 wild Chinook salmon** over 22 inches per year.

South Fork Canyon Area (from George Tryon Bridge upstream to the mouth of Craigs Creek)

Closed to fishing all year.

North Fork to Stony Creek

Open 4th Saturday in May through Mar 31, only. Otherwise, the same as the Mainstem.

Forks upstream of above reach limits

4th Saturday in May through Oct 31, only artificial lures with barbless hooks may be used. 2 hatchery trout or hatchery steelhead.**, 4 hatchery trout or hatchery steelhead** in possession, 2 cutthroat trout: minimum size limit 10 inches total length. Closed to salmon fishing.

* Wild Chinook salmon are those not showing a healed adipose fin clip and not showing a healed left ventral fin clip.

**Hatchery trout or steelhead in anadromous waters are those showing a healed adipose fin clip (adipose fin is absent). Unless otherwise provided, all other trout and steelhead must be immediately released. Wild trout or steelhead are those not showing a healed adipose fin clip (adipose fin is present).

5.88. STEELHEAD REPORT AND RESTORATION CARD REQUIREMENTS FOR INLAND WATERS. (a) Steelhead Fishing Report and Restoration Card Required. **All anglers must have a Steelhead Fishing Report and Restoration Card in their possession WHILE FISHING FOR OR TAKING steelhead in anadromous waters**, as defined in Section 1.04. Anglers must complete and return the card pursuant to regulations in this Section and in Section 1.74. **For purposes of these regulations, a steelhead trout is defined as any rainbow trout greater than 16 INCHES in length found in anadromous waters.** (b) Prior to beginning fishing activity, the cardholder must record the month, day, and location code on the first available line on the report card. (c) When a steelhead is retained, the cardholder must immediately fill in a circle indicating whether the fish is a wild fish or a hatchery fish.

SPECIAL NOTE

From Oct 1 through Jan 31, the steelhead sections of the Smith River are subject to low water closure whenever the flow at Hiouchi drops below 600 cfs. Call CDFW's low flow closure hotline at 707-822-3164 to check if Smith River will be open or closed to fishing. The recorded message is updated by 1:00 p.m. each Monday, Wednesday, and Friday,

REACH SURVEYS

From "Smith River Adult Trout and Salmon Surveys, Summer 2005":

Table 1: Total counts of adult fish for surveyed segments of the South Fork (23 Miles) and Middle Fork (11 Miles) Smith River, Summer 2005.				
Fish Category	Species	Size Range (inches)	South Fork	Middle Fork
Cutthroat, large	<i>O. clarki clarki</i>	8 – 20	216	52
Cutthroat, medium	<i>O. clarki clarki</i>	10–12	252	74
Cutthroat, small	<i>O. clarki clarki</i>	7 – 10	222	106
Resident Rainbow	<i>O. mykiss</i>	10–12	46	26
Steelhead	<i>O. mykiss</i>	16–28	13	2

Half-pounder	<i>O. mykiss</i>	12 -- 16	16	7
Chinook	<i>O. tshawytscha</i>	18–42	2	3
Sucker	<i>C. rimiculus</i>	8 – 20	4	2

List of survey segments (by upstream limit, see Fig. 2 below):

Middle Fork: 7-Siskiyou Fork; 6-Patrick Cr; 5-Madrone Camp; 4-Panther Flat; 3-North Fork; 2-Mary Adams; 1-Mile Post 9; down to South Fork.

South Fork: 11-Buck Cr; 10-McClendon Ford; 9-Indian Bar; 8-Hurdygurdy Cr; 7-Stevens Br; 6-Rattlesnake Slide; 5-Rock Cr Ranch; 4-Upper Br; 3-Carter Falls; 2-above Surprise; 1-Craigs Beach; down to Middle Fork.

COASTAL CUTTHROAT TROUT

Fishing tips and discussion from the [DFW](#) includes the following:

Due to their migratory behavior, large coastal cutthroat trout can be captured in streams and rivers when steelhead and salmon have migrated to the ocean. Adults in freshwater feed on benthic macroinvertebrates, terrestrial insects, and small fish. During winter, coastal cutthroat trout eat earthworms washed in by winter storms. In the marine environment, crustaceans and fish are the standard fare.

Stream fishing:

- Target pools or slower-moving habitat with fallen logs and undercut banks.
- Lures or small streamers on sink tip lines may work better than dry flies or nymphs that tend to catch more coastal rainbow trout.
- Drift the streamer or lure toward cover and then strip or reel it away.
- Trail a small nymph behind the streamer.
- Drifting or stripping large terrestrial insect patterns may also be successful.
- Or, target smaller creeks in which coastal cutthroat trout are the only trout present. The fish may be smaller, but the likelihood of catching a cutthroat is higher and dry flies can be quite successful.

Lagoons and estuaries:

- Tend to have larger coastal cutthroat trout that typically stay on the move, looking for prey such as crustaceans or smaller ocean fish.
- Cover lots of water by trolling with a streamer or small lure.
- Or, try fishing near river mouths for those trout foraging on food drifting or swimming downstream.
- Timing is important and good fishing periods are often associated with out-migrating salmon and steelhead fry.

From the 1995 Conference [“Sea-run Cutthroat Trout: Biology, Management and Future Conservation”](#) of the American Fisheries Society, a couple of selected abstracts:

“Sea-run cutthroat trout: Life history profile”, Patrick C. Trotter (Fishery Science Consultant, 4926 26th Ave. S., Seattle, WA 98108; 206/723-8620) -

The coastal cutthroat trout *Oncorhynchus clarki clarki* occurs along the Pacific coast of North America from Humboldt Bay, California to Prince William Sound, Alaska, in a zone that conforms remarkably closely with the Pacific coast rain forest belt. The sea-run cutthroat trout is the anadromous form of this subspecies. Sea-run cutthroat adults show a preference for small streams, low gradient systems, and the lower gradient downstream reaches of large river systems, although in some populations adults migrate considerable distances upstream. They spawn in small tributaries from late winter to late spring depending on the locality. Juveniles rear in streams for two or more years, and if alone in the stream, are found predominately in pools and other slow-water habitats, especially those with root wads and large wood. Young-of-year sea-run cutthroat trout appear to be displaced from pools by young-of-year coho salmon and from riffle habitats by juvenile steelhead. Seaward migration of smolts peaks in May. Smolt age 2 is common in populations that migrate to sheltered saltwater areas, smolt age 3 or 4 in populations that migrate to the open ocean. Anadromy does not seem to be strongly developed in coastal cutthroat trout; fish generally remain close inshore or in areas of reduced salinity, as in river plumes, while in salt water. Also, they seldom if ever overwinter in salt water, but return to streams in the late summer, fall, or winter of the year they go to sea. In some instances, these are overwintering migrations only, because female sea-run cutthroat trout seldom spawn before age 4. There is evidence that homing to natal streams is precise in fish that will be ready to spawn, but individuals returning to fresh water just to overwinter may not necessarily return to their natal stream. Sea-run cutthroat trout survive spawning rather well and recover their condition quickly. Repeat spawning is not at all uncommon, with some fish returning to spawn three, four, and even five times. Sea-run cutthroat trout may live to an age of 7 or 8 years and reach maximum fork lengths of around 500 mm.

“Why sea-run? An exploration into the migratory/residency spectrum of coastal cutthroat trout”, Thomas G. Northcote (10193 Giant’s Head Rd, RR # 2, Summerland B.C., V0H 1Z0, 604/494-8463)

Coastal cutthroat trout probably exhibit the broadest and most variable range in migratory behaviour to be found in the salmonid complex, perhaps as a result of the great variety of habitats that they can occupy at least temporarily, if not permanently. These include mainstem reaches of some large river systems such as the Fraser and Skeena in British Columbia, as well as many smaller rivers from northern California to Alaska (including their associated tributaries) and even very small separate streams flowing directly into the sea, where headwater populations may inhabit isolated pools with oxygen levels dropping at times below 2 mg×L⁻¹. In addition, the species also may live for periods in nearshore

marine waters, in estuaries, in sloughs and associated backwaters, as well as standing waters ranging from very small bogs and ponds to large deep inland lakes. Nevertheless, there are some surprising gaps in the coastal distribution of the species, such as that on northwestern parts of the Queen Charlotte Islands in British Columbia. The spatial and temporal extent of this range is examined with specific examples drawn from the literature, as well as from unpublished studies, covering California, Oregon, Washington, British Columbia, and Alaska.

Though some populations are highly migratory between rivers or streams and estuarine regions, if not coastal seawaters, in others there are components that apparently never enter the estuary, let alone the sea, and still others that may spend their entire life isolated in one or at most a few headwater stream pools. Populations that dwell in small to large lakes (some well over 100 km inland from the coast) are surely migratory, but only between freshwater spawning habitat and freshwater feeding and/or wintering habitat. It is suggested that the cutthroat trout, one of a few early "pioneer" species reoccupying areas of the northwestern Pacific coast closely after glaciation, has responded to the associated pressures of environmental variability and unpredictability by partitioning its populations into a broad migratory/residency spectrum, bet-hedging its long-term continuity.

"Direct observation assessment of coastal cutthroat trout abundance and habitat utilization in the South Fork Smith River, California", Hans N. Voight and Timothy R. Hayden (Fisheries Department and Institute for River Ecosystems, Humboldt State University, Arcata CA 95521; 707/826-3344)

We examined the seasonal variation in local abundance and habitat utilization of coastal cutthroat trout (*Oncorhynchus clarki clarki*) in 3.02 km of tributary and 3.05 km of mainstem river in the South Fork Basin of the Smith River, Del Norte County, CA. Coastal cutthroat trout are currently the least studied and least understood salmonid in terms of life history strategies in the Smith River system. Eight downstream snorkel surveys were made between May and September 1995, counting adult cutthroat trout in two size classes ("small" = <30 cm, "large" = >30 cm) within discrete pool and fast water habitat units along both reaches. On Hurdygurdy Creek, census counts ranged from a low of 17 fish in 3.02 km of stream to a high of 47 fish observed on 23 September, with intervening monthly fluctuations. Cutthroat trout became progressively more abundant within the South Fork reach. Abundances ranged from a low of 47 fish counted in 3.05 km on 10 June to a high of 142 fish present on 24 September. On both the Hurdygurdy Creek and the South Fork reaches, "small" cutthroat remained more numerous than "large" cutthroat throughout the study. Fast water habitat units comprised 70% of stream length on Hurdygurdy Creek, and 32% on the South Fork reach. The percentage of cutthroat trout using fast water (FW) was calculated for each size class for dives on each reach. "Large" cutthroat trout in Hurdygurdy Creek predominantly utilized pool habitat throughout the study (FW = 11%, n = 53), while "small" fish were less predictable in their habitat usage (FW = 47%, n = 159). On the South Fork reach, the same proportion of large fish (11%, n = 192) were found to reside in fast water units, yet only 21% of small cutthroat trout (n = 401) were observed in fast water. Trends of tributary and mainstem population abundances and diver observations suggested at least three different life history strategies being utilized by South Fork Basin cutthroat trout, including resident, potamodromous stream dwelling, and anadromous.