

LAKE ENVIRONMENTS by Rod Scarpella

A glance across the surface of one of the many South Platte Park lakes may give the impression that it's just a hole filled with water. However, lakes are actually very complex. Many lakes have three distinct layers that affect where fish hang out throughout the year. The upper layer, epilimnion, is heavily influenced by the weather. The frequent exposure to sunlight, cold air and wind make it vulnerable to temperature changes and mixing. The bottom layer of a lake, hypolimnion, is often more stable with colder and more dense water that is also very low in dissolved oxygen.

The middle layer, the metalimnion, also known as a thermocline, is critical to fish. Sunlight can only penetrate to a certain depth to warm the water. In the summer, increased temperatures continue to warm the upper layer of water, while the middle and lower layers stay cooler. The thermocline can form between 20 and 50 feet deep or shallower, depending on the water clarity, and may be 7 - 10 feet thick. The temperature difference between the surface and the area below the thermocline can be as much as 10 or 15 degrees, with the transition as rapid as one degree per foot.

A thermocline can provide aquatic life the best of both worlds, serving

as an air-conditioner to resist the summer heat near the surface, but also providing higher levels of dissolved oxygen that the lower layer cannot provide. Sometimes plankton, minute floating invertebrates, at the thermocline can be so thick that it appears as a shaded band on a fish-finder. This makes the thermocline a cafeteria for a host of small fish, and the larger predatory fish that are seeking them.

The onset of winter cools the water in the upper layer, below the temperature of the lower layers. When this happens, the colder denser surface water sinks to the bottom of the lake causing an autumn turnover, or mixing, of the lake. This also happens in spring when ice melts into the water that is near freezing temperature and the dense water sinks. Nutrients are brought down into the depths of the lake, oxygen mixes throughout the system, water temperatures become more uniform, and often the thermocline disappears. As the layers form, cold water fish species begin to migrate back to the thermocline.

Next time you look at the surface of a placid lake or wade in its shallows, ask yourself if there is a layer somewhere out of sight that might be teeming with life in a world you can't see.

South Platte Park

A Natural Area

Fishing Information



South Platte Park &
The Carson Nature Center
3000 W. Carson Dr.
Littleton, CO 80120
303.730.1022
ssprd.org/nature
[facebook.com/
SouthPlattePark](https://facebook.com/SouthPlattePark)

\$1 Suggested Donation



Fishing Laws

It is your responsibility to know and understand the Colorado Division of Wildlife's (CDOW) rules and regulations before going out to fish.

CDOW fishing information can be obtained at:

<http://wildlife.state.co.us/fishing/>

- ◆ No boats or belly boats are allowed in South Platte Park (SPP) lakes.
Boats are allowed in the river.
- ◆ Fishing season is year-round.
- ◆ Everyone fishing in public waters must have a valid fishing license, except:
 - (1) those under 16 years of age,
 - (2) during the first full weekend of June each year, and
 - (3) "Colorado residents on active duty with U.S. armed forces out of state can fish free without a license while here on temporary leave, max. 30 days a year. You must carry official leave papers while fishing."
- ◆ The only CDOW-approved special regulation in SPP waters is a 15" minimum size limit for largemouth and smallmouth bass.
- ◆ All fish limits follow CDOW general statewide regulations.

| | Daily Limit | Possession Limit |
|---------------------------------|-------------|------------------|
| Trout-in aggregate | 4 | 8 |
| Walleye | 5 | 5 |
| Bass (largemouth / small-mouth) | 5 | 5 |
| bluegill/sunfish-in aggregate | 20 | 20 |
| yellow perch | 20 | 20 |
| channel catfish | 10 | 10 |
| bullfrogs | unlimited | unlimited |
| crayfish | Unlimited* | Unlimited* |

- ◆ It is illegal to have or harvest "nongame species," including plains topminnow, darters, leopard frogs and mollusks in our area.
- ◆ Archery is considered a projectile weapon by local ordinance and SPP rules and is not permitted.
- ◆ Gigs are permitted for carp, suckers and bullfrogs.
- ◆ Chumming is prohibited statewide.
- ◆ Taking of bait fish from natural waters is locally prohibited. Therefore, seining for crayfish is also prohibited.
- ◆ Bullfrogs are a non-native species, harvest as many as you can.
- ◆ *Crayfish are diminishing in size & quantity in SPP. Consider limiting your catch size.

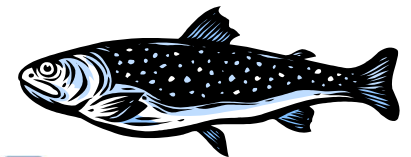
Yellow Perch-Yellow perch eat worms, small aquatic insects and larvae, plus other little organisms. They are best caught with a little piece of worm through the ice in winter.

Walleye-Walleye can offer a surprise find in South Platte Park. The lucky fisher might meet one that has washed out of Chatfield and found its way into Redtail, since it's connected to the river. They have big teeth to feed voraciously on fish. A reflective layer in their eye called a tapetum lucidum improves their vision in the low light conditions of deep water. Since they like cool water, late Spring and Fall are the best times to fish for them.

Other aquatic organisms lurking beneath the surface include bullfrogs and their tadpoles, carp and Asian, or Corbiculid, clams. Bullfrogs, originally prized for their legs, are hardy and voracious nuisance predators. They'll eat anything that smells or looks tasty, walks, swims or crawls and fits in their mouth.

Frightening, huh? They're SPP's largest frog; it's a good thing they only grow to 2 pounds. Grass carp, known for their relentless plant and algae consumption, have been stocked into Bufflehead. Common carp were introduced from China as a fine food fish. Have you ever tried them? Carp can weigh more than 25 pounds and can overpopulate and compete with native species. Common carp are sometimes seen spawning in lakes or are caught in the river with bait. Asian clams are prolific and filter microscopic plants and animals from the water column.

Remember that all state fishing regulations apply in South Platte River including the general bag and possession limits. A valid fishing license is required. A court summons is a bad way to end a fishing trip.



 Post your catches & photos on the Park's facebook page:
[www.facebook.com/SouthPlatte Park](http://www.facebook.com/SouthPlattePark)

Aquatic Critters

Lurking under the surface of SPP's water are many species of scaly animals covered with a layer of slimy mucous. Are these phantoms or fish? The fish you'll find include rainbow and brown trout, largemouth bass, channel catfish, bluegill, yellow perch and walleye. Surprisingly, none of these are native to the waters of our area. So, which of our fishy friends were here historically? Little fish like white and long-nose suckers, Iowa and Johnny darters, creek chubs, long-nose dace, shiners, stone-rollers and other minnows are native. Some of those little fish are still here, but the exotic sport fish are the ones that bring out anglers in every season.

Rainbow Trout-As the ice fades in March, rainbow trout are cruising the lakeshores and make for good fishing in Lake Eaglewatch. They start biting early because they're hungry from their winter fast. They feed mostly on aquatic invertebrates, small fish and other organisms. Start fishing with dry flies in early spring, then resume in the fall. If you're a bait fisher, you can do so whenever; especially, during the summer when trout are in deeper, cooler water.

Largemouth Bass-Bass are fish eaters and feisty during May. At this time, they're hunting, setting up territories and spawning at near-shore weed beds. Fishing can be particularly successful with any lure or bait that looks like a big, tasty critter; they even eat crawdads! Crawdads eat a lot of dead and decomposing organic material and pass their energy up the food chain. Remember that SPP has a 15" minimum size limit on bass. Try fishing in Blackrock, Eaglewatch, Redtail or Bufflehead.

Bluegill-In June, during their spawning, little bluegill start picking flies off the surface. Try fly and bobber fishing at this time in Bufflehead. Along with perch, bluegill can be taken through the ice in winter by jiggling a piece of worm. Rangers measure ice thickness and permit fishing only during periods of thick ice. Watch for signs at the lake, or ask at the Nature Center if ice fishing is allowed.

Channel Catfish-In summer, when other fish are chilling out down deep in the lake, catfish are spawning and getting happy in the warmer water. They forage near the bottom or in dark areas and eat most anything dead or alive.

WARNING –DANGER

The lakes in South Platte Park (SPP) were all formed from gravel mining pits; as such they generally have steep and unstable sides. All the lakes are at least 16 feet deep. Wading out from shore can be dangerous as the sides may avalanche – a foot or so of water may instantly become 20 feet or more.

South Platte Park Information for Fishermen

The lakes in the South Platte Park (SPP) are periodically stocked by the Colorado Division of Wildlife. Information about when and where the stockings occur is available at:

<http://wildlife.state.co.us/Fishing/Reports/StockingReport/Pages/StockingReport.aspx>

Some of the lakes in South Platte Park have been improved. Staff and volunteers have gone back in to create wetlands and varied shorelines with aquatic plants and cottonwood trees providing habitat for baby fish and crayfish.

Below about 7 feet deep, very few plants grow to provide food or shelter for aquatic life. Since most SPP's lakes are 20 - 35 feet deep, there was little structure or shelter. Many artificial structures have been placed in the lakes to enhance places for fish to hide from predators and find food and to improve the fishing opportunities. These structures include:

Cribs – log cabin crossed log structures which may be hollow, or filled with broken rock or concrete to provide hiding places.

Concrete Pipes - create hiding places for large catfish and other bottom-dwellers or fish that prefer darker places

Stakebeds - vertical slats create spaces for small fish to escape predators.

Tire Wheels - provide crevices for small fish and crawdads to hide

Sunken trees and brush piles - concrete helps keep these structures on the bottom where they create places for algae to grow and fish to hide.

Thanks to volunteer Davis P for creating this booklet!

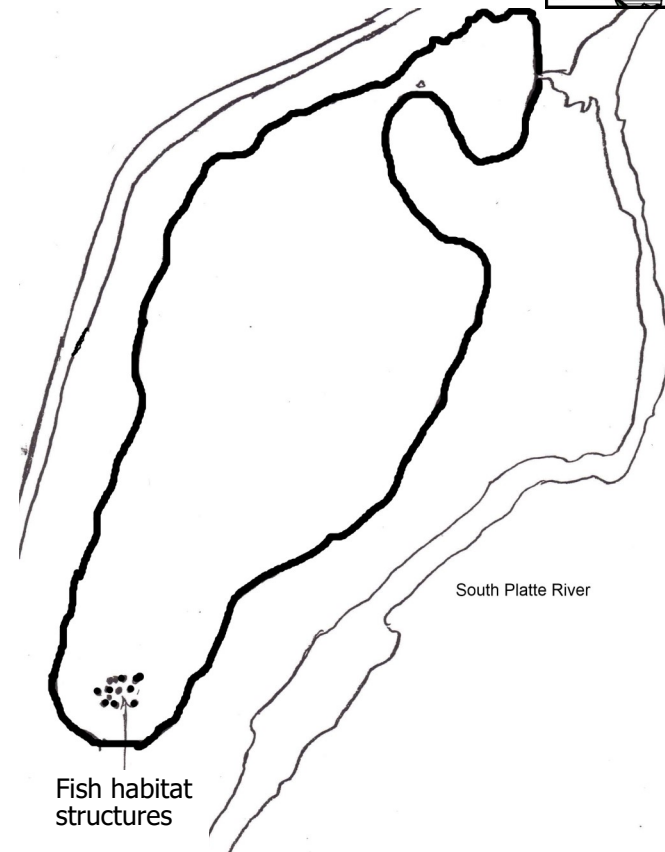
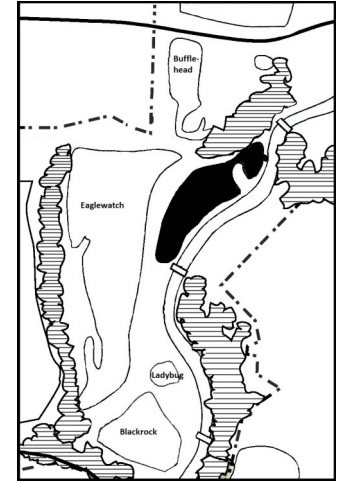
Much thanks to SPPP volunteer Davis Peticola for creating this helpful fishing pamphlet!

| Sport Fish in the South Platte Park | | | | | | | |
|-------------------------------------|-------|------------------|-------------------|----------------|----------------|-------------------|----------------------------------------------------------------------------------|
| | River | Blackrock Lake 1 | Eaglewatch Lake 2 | Redtail Lake 3 | Ladybug Lake 4 | Bufflehead Lake 5 | Cooley Lake |
| Acreage | na | 7.4 | 41.7 | 12.0 | 0.4 | 6.4 | 138.3 |
| Deepest Spot (Feet) | na | 37 | 30 | 30 | 16 | 19 | NA |
| Shoreline (1000 Feet) | 25.0 | 2.4 | 7.9 | 3.3 | 0.5 | 3.0 | 14.0 |
| Additional Information | p7 | p6 | p8 | p9 | p7 | p7 | No general public access allowed |
| Bass, Largemouth | | X | X | X | X | | Fishing is not allowed in Cooley Lake. This is a Wildlife Restricted Zone |
| Bass, Smallmouth | | | | X | X | X | |
| Bluegill | | X | | | | X | |
| Carp | | | | | | X | |
| Channel Catfish | X | X | | X | | | |
| Green Sunfish | | | | | X | | |
| Trout, Brown | X | | | | | | |
| Trout, Rainbow | X | X | X | X | | | |
| Walleye | | | | X | | | |
| White Sucker | X | | | X | | | |
| Yellow Perch | | | | | | X | |

Redtail Lake

12.0 acres
 30 ft deep
 3,280 ft of shoreline
 Sport Fish

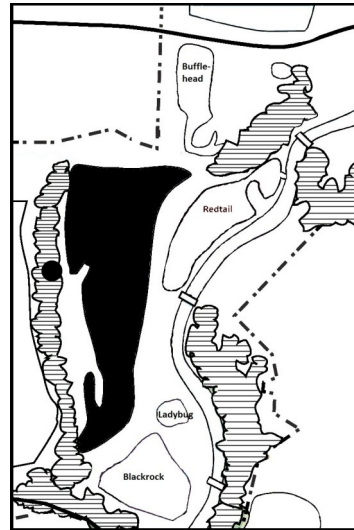
Bass, Largemouth
 Bass, Smallmouth
 Channel Catfish
 Trout, Rainbow
 Walleye
 White Sucker



Eaglewatch Lake

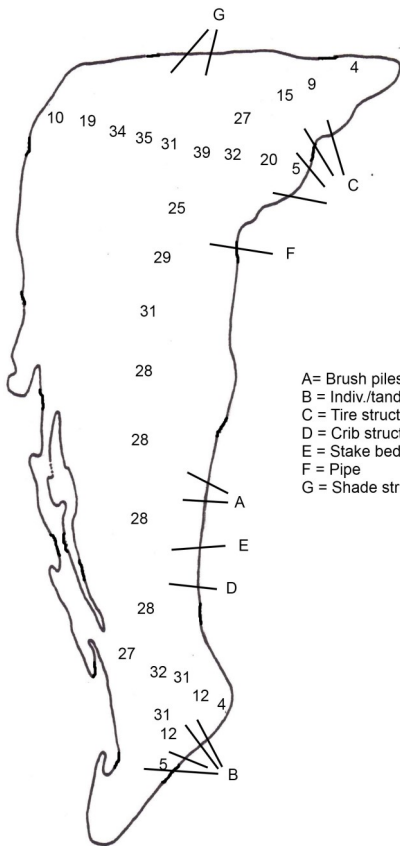
41.7 acres
 30 ft deep
 7,920 ft of shoreline
Sport Fish

Trout, Rainbow
 Bass, Largemouth

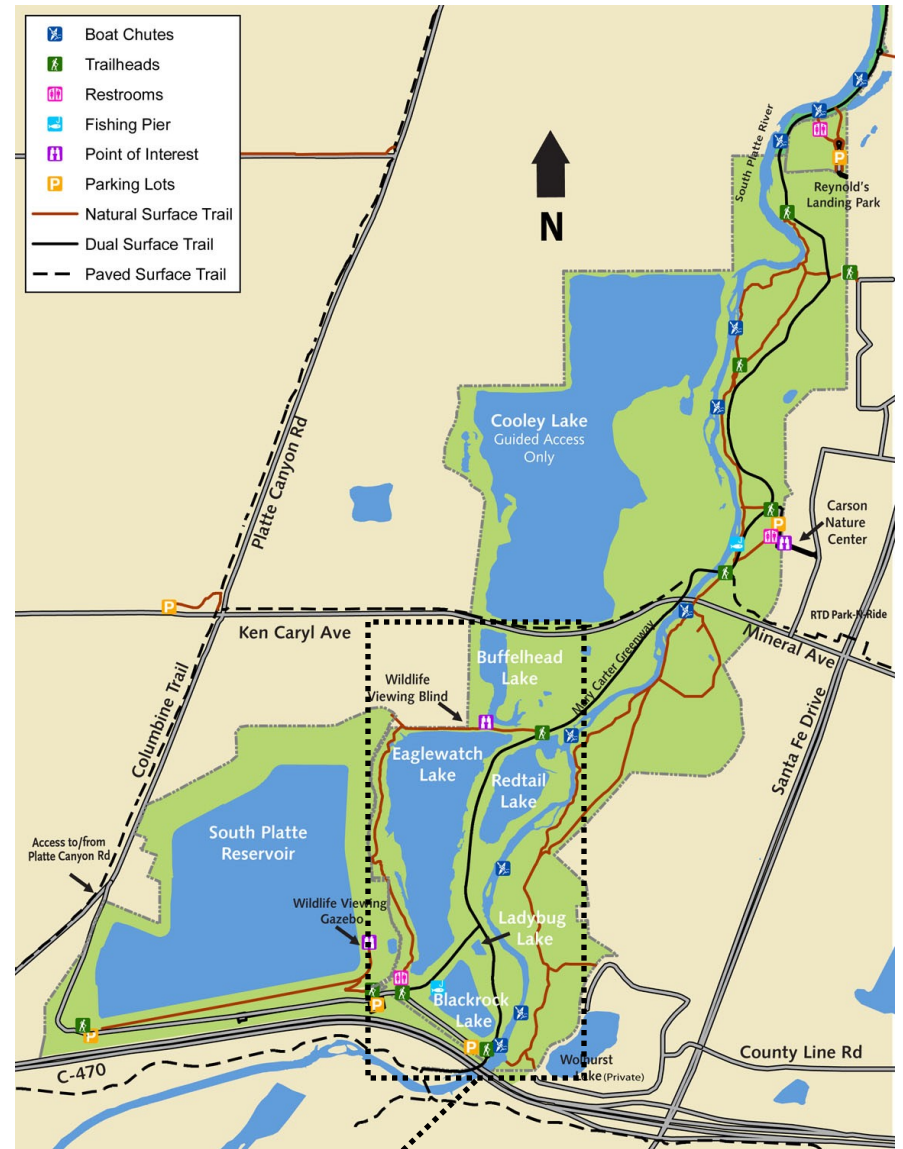


Habitat improvements and depth soundings

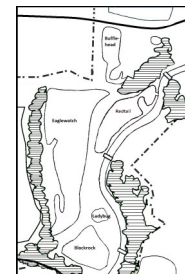
If you are fishing Eaglewatch in the winter then be sure to occasionally scan the tops of the cottonwood trees on the west side of the lake for eagles.



- A= Brush piles
- B = Indiv./tandem larger logs
- C = Tire structures
- D = Crib structures
- E = Stake beds
- F = Pipe
- G = Shade structures



- Boat Chutes
- Trailheads
- Restrooms
- Fishing Pier
- Point of Interest
- Parking Lots
- Natural Surface Trail
- Dual Surface Trail
- Paved Surface Trail

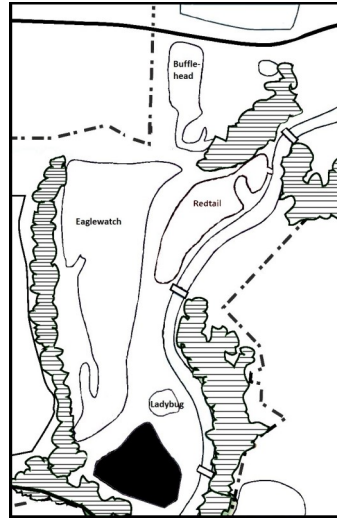


Fishing areas highlighted in this booklet

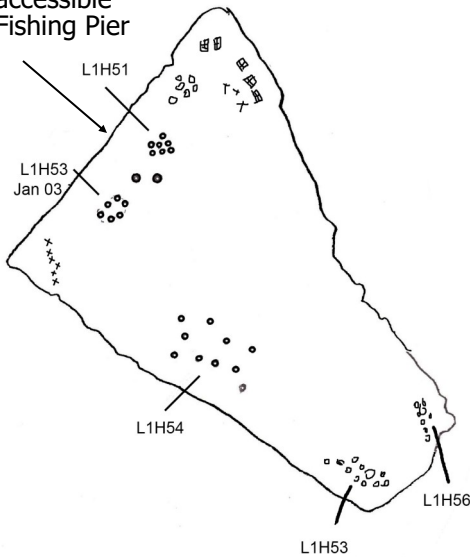
Blackrock Lake

7.4 acres
37 ft deep
2,400 ft of shoreline
Sport Fish

Bass, Largemouth
Bluegill
Channel Catfish
Trout, Rainbow



Handicap accessible
Fishing Pier



**Handicap Accessible
Fishing pier.**

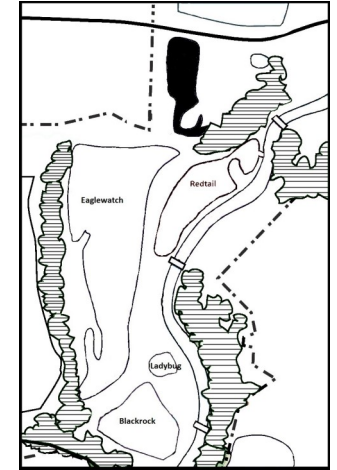
**Habitat improvements
made as indicated.**

GPS coordinates for
L1H51:
135 0496362
UTM 4379919
L1H52:
135 0496347
UTM 4379909
L1H53:
135 0496327
UTM 4379868
L1H54:
135 0496401
UTM 4379806
L1H55:
135 0496494
UTM 4379740
L1H56:
135 0496535
UTM 4379790

Bufflehead Lake

64 acres
19 ft deep
3,040 ft of shoreline
Sport Fish

Bass, Smallmouth
Bluegill
Yellow Perch
Grass Carp

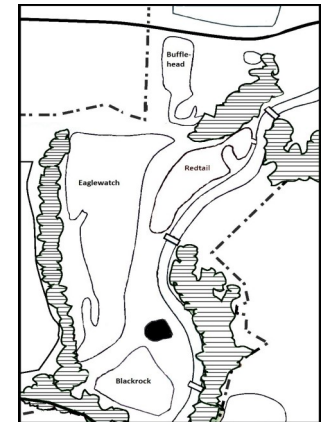


Fun Fact: North of Peacock Wildlife
viewing Blind. Lake named after one of
the regular winter visiting duck species.

Ladybug Lake

0.4 acres
16 ft deep
480 ft of shoreline
Sport Fish

Bass, Largemouth
Bass, Smallmouth
Green Sunfish



River

25,040 ft of shoreline

Sport Fish

Channel Catfish
Rainbow Trout
Brown Trout
White Sucker