

Recreational Fishing Overview

Rueter-Hess Reservoir's Inaugural Year: 2023



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Rueter-Hess
Recreation
AUTHORITY – ESTABLISHED 2014

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Introduction

Stakeholders of Rueter-Hess Reservoir (RHR) pledged to preserve the land, respect its' history and heritage, be a wildlife sanctuary, and educate visitors. Once the property was acquired and community interests investigated, an environmental impact assessment prioritizing clean water established boundaries for wildlife conservation and public recreation. Although constructed to meet future water demands, on August 4, 2023, RHR reached a highly anticipated milestone when it opened to the public for recreational fishing. Specialized regulations dedicated to protecting water quality and recruiting sports fish were enacted to support anglers as the reservoir reaches its goals. Teaming with Douglas County Parks and Recreation Rangers, anglers were asked to exhibit proper fish handling and recovery techniques to reduce stress and increase survivability and complete an online creel survey (Figure 1). Many anglers reported catching large walleye and observing schools of baitfish, while others did not see much, if any, fish activity.

Fish Handling & Recovery Techniques

IMPROVE THE SURVIVAL OF RELEASED FISH

- ❖ STAY calm.
- ❖ AVOID exhausting the fish.
- ❖ KEEP your fish in the water until it is netted or released.
- ❖ WET your hands before touching the fish.
- ❖ USE a landing net with soft or knotless mesh.
- ❖ PREVENT injury with the proper hook removal tool(s).
- ❖ TAKE a picture; pre-planning is key.
- ❖ LET the fish fully recover before releasing it.

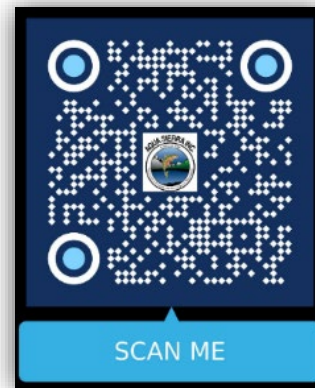


Figure 1. RHR Creel Survey QR Code.

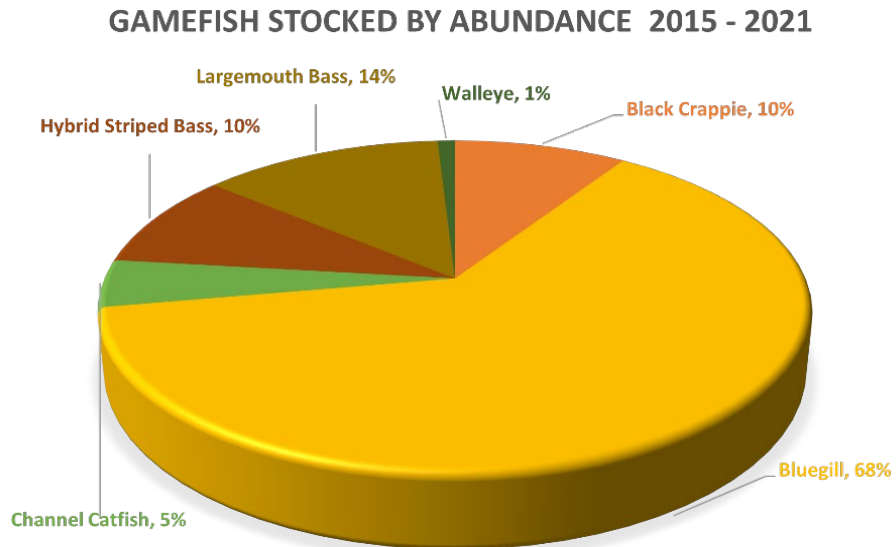
Background

RHR contains a vibrant fishery with several stocked species and others entering from Newlin Gulch, a tributary of Cherry Creek. The reservoirs' trophic structure comprises eleven known fish species (Table 1.), with six top and mid-tier gamefish species stocked since 2015 (Figure 2.). A trophic structure broadly describes a subset of organisms that similarly transfer energy within a system. Maintaining energy levels between trophic levels prevents catastrophic population crashes disrupting ecological balance. Active monitoring through visual observations, fisheries assessments, and recent creel data uncovered fish composition and abundance shifts. Also, bluegill and black crappie continue to escape recapture. As pressure increases, habitat manipulation or ongoing stocking efforts will be necessary to sustain fish populations.

Table 1. List of Known Fish Species in RHR by Stocking and/or Observation.

Common Name	Scientific Name
Black Crappie	<i>Pomoxis nigromaculatus</i>
Bluegill	<i>Lepomis macrochirus</i>
Brook Stickleback	<i>Culaea inconstans</i>
Channel Catfish	<i>Ictalurus punctatus</i>
Fathead Minnow	<i>Pimephales promelas</i>
Hybrid Striped Bass	<i>Morone chrysops x Morone saxatilis</i>
Largemouth Bass	<i>Micropterus salmoides</i>
Triploid Grass Carp	<i>Ctenopharyngodon idella</i>
Walleye	<i>Sander vitreus</i>
White Sucker	<i>Catostomus commersonii</i>
Yellow Perch	<i>Perca flavescens</i>

Figure 2. Gamefish Species Stocked in RHR by Abundance.



Public Fishing Initiative

A healthy, diverse fishery demonstrates ecological balance and is paramount to good water quality. To mutually support public health and recreation, a sustainable fishing program was adopted prior to opening day to conserve fish populations and maintain a healthy aquatic ecosystem. The public fishing initiative identified weekly capacity limits, special rules and regulations, and visitor experience and education. With the expanding trophy-sized sports fish recently reaching sexual maturity, catch and release were critical to reproduction. Additionally, a participation survey examined fishing success, catch effort, and overall satisfaction.

Based on park ranger staffing, RHR was open for public recreation on Friday, Saturday, Sunday, and Monday. Fishing reservations were limited to 100 anglers per week or 25 anglers daily and closed once surface water froze. After securing a park reservation, visitors with a valid Colorado fishing license were permitted to fish in authorized areas around the shoreline away from the dam and open water from non-motorized, ANS-inspected watercraft. Each angler was limited to only one standard pole, a barbless hook, and artificial flies and lures (see Figure 3.).

Figure 3. RHR Fishing Regulations, 2023.

Special Rules and Regulations* <i>*Valid Colorado Fishing License Required</i>	
➤	Maximum Number of Anglers
❖	weekly: 100
➤	Standard Pole and Tackle Only
❖	waders, belly boats, etc. are not allowed
➤	Catch and Release
➤	Single Pole Fishing
➤	Single, Barbless Hooks
➤	Artificial Lures and Flies Only
➤	Live and Artificial Bait is Prohibited
➤	Fishing Permitted in Authorized Areas

Catch & Release Fishing

- Bait is Prohibited
 - ❖ live or dead minnows, or other baitfish, crustaceans, amphibians, fish eggs, etc.
- Barbless Artificial Flies & Lures Only
 - ❖ properly sized single circle or barbless hooks
 - ❖ single hooks cause less injury than treble hooks

ARTIFICIAL stipulates devices made entirely of, or a combination of, natural or synthetic non-edible, non-scented materials, whether the scent is added in the manufacturing process or applied afterward, or materials such as wood, plastic, silicone, rubber, epoxy, glass, hair, metal, feathers, or fiber designed to attract fish.

BAIT specifies hand-moldable material designed to attract fish by the sense of taste or smell; devices with attractants added or externally applied, whether or not the scent is added in the manufacturing process or applied afterward, and scented manufactured fish eggs and traditional organic baits, including but not limited to worms, grubs, crickets, leeches, dough baits or stink baits, insects, crayfish, human food, fish, fish parts or fish eggs.



Fishing Review

The highly anticipated opening of RHR to recreational fishing in 2023 offered nearly 2,000 reservations to the public. Voluntary creel data offered insight into catch effort, angler satisfaction, and species presence. As predicted, responses to the Creel Survey were low, but biologists and park rangers interviewed anglers weekly to aid the assessment. Overall, most anglers appeared satisfied despite mixed expectations and the restrictive rules.

Between August 4 and November 30, 2023, the creel survey garnered 79 responses from 69 unique users, and more than 250 anglers were interviewed onsite. Based on this information, the highest catch rates were observed in the late morning and early afternoon from open water, where, on average, successful anglers reported hooking two adult walleye per hour (Picture 1.). Largemouth bass and yellow perch were also encountered in open water. The data set was enriched by a few anglers who returned for a second opportunity and recounted similar conditions but larger fish. Although initial feedback expressed concern about the imposed regulations, it was quickly dampened by trophy-sized fish and the exclusivity awarded to patient anglers.

2023 FISHING FACTS

Most Caught

#1 Walleye
#2 Yellow Perch

Largest Recorded

24"
6"

General Observations

- grass carp exceeding 24"
- multiple sizes of largemouth bass
- large schools of baitfish

Picture 1. Adult Walleye, RHR 2023.



Fishing Program Revisions and Updates

The fishing program was developed as an adaptive management strategy to address conflicts in conservation and community recreation interests. Mixed feedback from anglers suggested appreciation for the exclusivity and “exceptional” fishing experience but also disappointment with the imposed capacity limits and fishing regulations. Although valuable, fishery dynamics guide revision and updates. Young waterbodies, such as RHR, cannot sustain high fishing pressure without the risk of population crashes. However, modifications to the program to benefit the angler experience should be considered once strong recruitment of desirable species is documented.

Selective Harvest

While there are signs of successful reproduction and growth among top-tier fish species like largemouth bass and mid-tier species, such as yellow perch, data remains scarce for other species.

- A selective harvest of yellow perch may be considered; however, walleye should *not* be harvested until further evaluations are conducted.

Number of Daily Anglers

On average, Park rangers reported that 28% of anglers did not show up for their reservation, and occasional rates surpassed 50%.

- If supported by local park rangers, daily fishing passes could be increased.

Accessibility

Clear paths to intentional shoreline sites will accommodate more anglers without compromising sensitive aquatic and terrestrial habitats.

- Improving access and designating specific fishing zones is suggested to coincide with increasing daily passes.

Public Education

Angler awareness is effective for collaborative compliance in conservation efforts.

- Messaging across all platforms must emphasize the importance of the creel survey responses, adherence to rules and regulations, and responsible fishing practices.



Summary

The fishing program for Rueter-Hess Reservoir reflects an adaptive management approach aimed at balancing conservation and recreational interests. After reviewing survey data, updates to regulations are suggested as a commitment to enhance the angler experience while preserving ecological integrity. Recognizing the importance of sustaining a young ecosystem and maintaining drinking water standards, revisions prioritize documenting species recruitment before considering significant harvesting. While selective harvesting of yellow perch may be considered, caution is advised regarding walleye and other species until further evaluations are conducted. To accommodate demand, daily angler reservations can be increased if supported by Park rangers; however, shoreline accessibility should be simultaneously improved to designate zones for fishing. Lastly, public education must continue emphasizing the importance of visitor feedback, rules and regulations, and responsible fishing practices.

