



# Jumbo Annex Reservoir

## FISH SURVEY AND MANAGEMENT DATA

Mandi Brandt - Aquatic Biologist (Brush)  
 mandi.brandt@state.co.us / 970-842-6330

**General Information:** Jumbo Annex Reservoir is an 80 acre water located on the Red Lion State Wildlife Area. Anglers can expect to catch smallmouth bass, black crappie, and channel catfish. Smaller numbers of largemouth bass, walleye, saugeye, and wiper can also be caught. Non-motorized watercraft are permitted.

**Location:** Logan County. From I-76 take Exit 155 and head 3 miles north to Hwy 138. Take Hwy 138 1 mile northeast to CR 95. Take CR 95 ¼ mile north to the reservoir.

**Recreational Management:** Colorado Parks and Wildlife

**Fishery Management:** Warmwater angling

**Purchase a Fishing License:** <http://wildlife.state.co.us/ShopDOW/AppsAndLicenses/>

### Amenities

- Informational kiosk
- Wildlife viewing
- Ice fishing

### Regulations

- Min. size for largemouth and smallmouth bass is 15".
- Min. size for crappie is 10".
- Min. size for walleye and saugeye is 15" (only 1 can exceed 21").
- Min. size for wiper is 15".
- Min. size for tiger muskie is 36" (1 fish limit).
- Statewide bag and possession limits also apply.
- Gas or electric motors are NOT permitted.

### Previous Stocking

#### 2011

Smallmouth bass  
 Largemouth bass  
 Channel catfish  
 Black crappie  
 Bluegill

#### 2010

Smallmouth bass  
 Channel catfish  
 Black crappie  
 Bluegill

#### 2009

Smallmouth bass  
 Channel catfish  
 Black crappie  
 Bluegill  
 Rainbow trout and Cuttbow

#### 2008

Smallmouth bass  
 Channel catfish  
 Black crappie  
 Tiger muskie  
 Cuttbow

### Sportfishing Notes

#### Smallmouth bass

- The south half of the reservoir produces more fish.
- Small (black) spinners work well.

#### Black crappie

- This reservoir supports an excellent black crappie fishery.
- Fishing off of the dam or near downed timber from April-June is recommended.
- Traditional baits and lures work well.

#### Channel catfish

- Fishing the bottom off of the dam is recommended.
- Chicken liver seems to work better than cut shad or shrimp.

#### Tiger muskie

- This species was stocked from 2006 to 2008 (must be 36" to keep).
- No northern pike are in Jumbo Annex Reservoir.



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*2011 annual survey*



Table 1. Summary data for fish caught during the 2011 annual survey at Jumbo Annex Reservoir. Data are based on 31 hours of gillnetting, 34 hours of trap netting, and 0.6 hours of electrofishing. During electrofishing extra effort was made to capture and remove invasive common carp and crews did not actively net gizzard shad due to extremely high numbers. Including the numbers caught and relative abundances of these two species would inaccurately portray the other data collected; therefore, these statistics were omitted.

Species	Number caught	Relative abundance (%)	Average length (in)	Length range (in)	Average weight (lbs)	Weight range (lbs)
Black crappie	36	6.38	9.9	5.9 - 13.0	0.61	0.1 - 1.3
Bluegill	105	18.62	4.8	1.3 - 7.2	0.11	0.0 - 0.3
Channel catfish	20	3.55	15.4	7.5 - 20.9	1.21	0.1 - 2.9
Common carp	N/A	N/A	18.9	4.6 - 26.9	3.04	0.1 - 6.3
Freshwater drum	63	11.17	6.0	2.8 - 18.9	0.22	0.0 - 3.1
Gizzard shad	N/A	N/A	4.4	1.2 - 19.1	0.37	0.0 - 3.3
Green sunfish	15	2.66	4.6	2.0 - 6.9	0.08	0.0 - 0.3
Largemouth bass	87	15.43	6.1	2.0 - 16.6	0.22	0.0 - 2.2
River carpsucker	3	0.53	16.7	12.6 - 19.4	2.53	0.9 - 3.6
Smallmouth bass	124	21.99	9.4	1.9 - 14.4	0.48	0.0 - 1.3
Walleye	1	0.18	21.9	21.9 - 21.9	3.30	3.3 - 3.3
Wiper	1	0.18	21.3	21.3 - 21.3	4.58	4.6 - 4.6
Yellow perch	1	0.18	2.8	2.8 - 2.8	0.01	0.0 - 0.0



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### Bass (largemouth and smallmouth)

Largemouth bass and smallmouth bass were first stocked into Jumbo Annex Reservoir in 1989 and 1991, respectively. Smallmouth bass have performed very well in the reservoir, creating what was once one of Colorado's premier smallmouth bass fisheries. In contrast, largemouth bass have had limited success in the reservoir. Thus, this species is only stocked as a surrogate for smallmouth bass when Colorado Parks and Wildlife hatchery production of smallmouth bass is low.

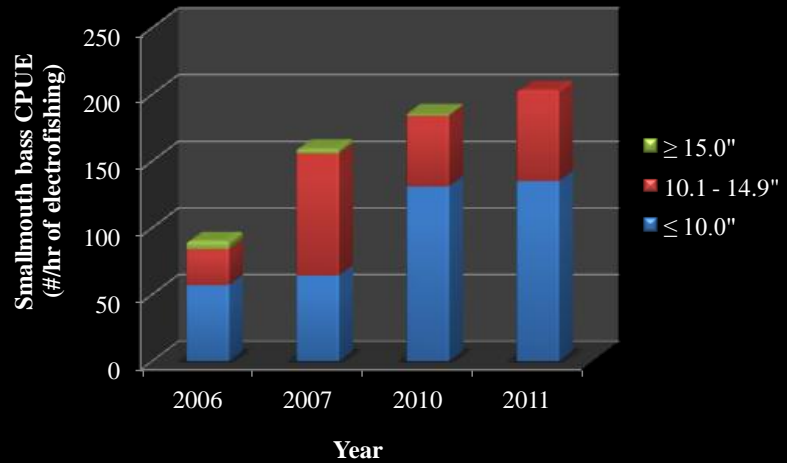


Figure 1. Smallmouth bass catch-per-unit-effort (CPUE) during the 2006, 2007, 2010, and 2011 annual surveys at Jumbo Annex Reservoir. For comparative purposes, the number of fish collected was standardized for one hour of electrofishing.



Smallmouth bass catch-per-unit effort (CPUE) increased from 2006 to 2011 (Figure 1), indicating an increase in population size. While larger population sizes can elevate angler catch rates, they also create more intra-specific competition for resources, decreasing growth rates. The number of smallmouth bass  $\geq 15''$  caught during annual surveys has decreased from 2006 to 2011 (Figure 1). Though this trend could be partially attributed to anglers creeling fish  $\geq 15''$ , the 15'' minimum size limit was established prior to 2006. Therefore, it is likely that the smallmouth bass population may be experiencing some level of stunting. Bass stocking rates will be decreased in the future in an effort to increase growth rates. Based on the smallmouth bass population size, anglers can expect a good catch-and-release fishery; however, anglers should not expect to catch many keeper-sized smallmouth bass in 2012.



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### Black crappie

Similar to its sister water (Jumbo Reservoir), Jumbo Annex Reservoir supports a quality black crappie fishery. Creel surveys have indicated that black crappie comprise 56% of angler-caught fish at the reservoir. Creel surveys have also shown that black crappie are the most sought after species at Jumbo Annex Reservoir, with 76% of anglers preferring to fish for black crappie over all other species.



Angler preferences, coupled with the low numbers of black crappie caught during the 2006 and 2007 annual surveys, prompted an increase in stocking rates from 2008 to 2011. As a result, the black crappie population is thriving. Mean lengths and weights have increased from 6.1" and 0.20 lbs (2006), to 8.4" and 0.39 lbs (2010), to 9.9" and 0.61 lbs (2011; Table 1). This growth is echoed by black crappie relative stock densities (RSD; Table 2). Relative stock density identifies the percentage of stock length fish that are from stock to quality length [RSD<sub>(S-Q)</sub>], quality to preferred length [RSD<sub>(Q-P)</sub>], preferred to memorable length [RSD<sub>(P-M)</sub>], memorable to trophy length [RSD<sub>(M-T)</sub>], or of trophy length [RSD<sub>(T)</sub>]. Numbers of quality to preferred, preferred to memorable, and memorable to trophy sized black crappie have increased from 2006 to 2011 (Table 2), providing anglers with an excellent black crappie fishery. Trophy sized black crappie undoubtedly inhabit Jumbo Annex Reservoir, and future management will focus on producing more trophy sized fish. Black crappie fishing should be great during the 2012 fishing season!

Table 2. Relative stock density (RSD) of black crappie during the 2006, 2010, and 2011 annual surveys. S = stock length, which is the length at which fish are considered to provide recreational value. Q = quality length, which is considered to be the minimum size of fish most anglers like to catch. P = preferred length, which is considered to be the length of fish most anglers would prefer to catch. M = memorable length, which is considered to be the size of fish most anglers remember catching. T = trophy length, which is considered to be the size of fish worthy of acknowledgement. Stock, quality, preferred, memorable, and trophy lengths for black crappie are 5", 8", 10", 12", and 15", respectively.

YEAR	RSD (S-Q)	RSD (Q-P)	RSD (P-M)	RSD (M-T)	RSD (T)
2006	86	0	14	0	0
2010	39	14	43	4	0
2011	11	42	33	14	0