



Wisconsin Department of Natural Resources Lake Survey Information Sheet



Dry Dam Lake, St Croix Co. 2010

Lake Description:

Dry Dam Lake is a shallow, 43 acre seepage lake located approximately 6 miles northeast of the city of Hudson in west central St. Croix County. It is entirely surrounded by a private hunting preserve. Members have access to an unimproved launch. Otherwise access is obtained by navigating the outlet stream from Willow River State Park. During 2010, there was no public access to Dry Dam Lake. Lake levels were low due to ongoing drought conditions.

Survey Description:

Dry Dam Lake was surveyed in the spring of 2010 using fyke nets and electro-fishing gear to assess the health and status of the fishery. Immediately after ice out, six fyke nets were set targeting adult game fish. Nets were lifted daily for four days. When water temperatures reached 50-55°F, a bass/pan fish electro-fishing survey was conducted to obtain catch per unit effort (CPE) estimates for bass and pan fish species. This report combines data from netting and electro-fishing.

Gamefish:

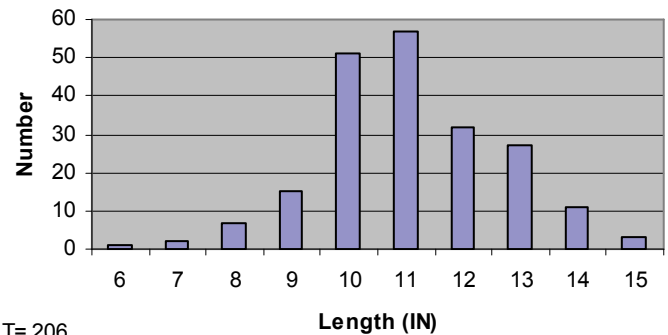
Largemouth bass are the most abundant game fish in Dry Dam Lake. A total of 206 largemouth bass ranging in size from 6.5 to 15.5 inches were collected during the surveys. The average length was 11.3 inches. The CPE estimate is 108.4 largemouth bass per mile of shoreline or 4.8 per acre.

Ten northern pike were collected, ranging in size from 20.5 to 37.1 inches. The average length was 31.8 inches. The CPE for northern pike is 5.3 per mile of shoreline, or 0.2 per acre. One smallmouth bass was sampled during the survey.

Panfish:

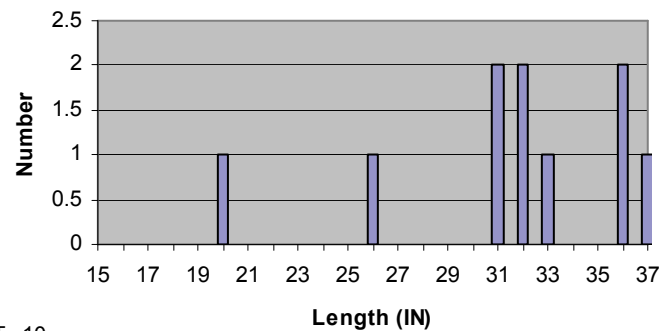
The most common pan fish collected during the 2010 survey were bluegill (1,037), black crappie (311) and yellow perch (325). Bluegill length ranged from 2.5 to 8.8 inches with an average of 7.1 inches. Electrofishing CPE was 293.7 per mile and netting CPE was 20 per net night. Black crappie ranged in length from 2.7 to 11.8 inches with an average length of 9.0. Netting CPE was 13 per net

Largemouth Bass Length Distribution
Dry Dam Lake, 2010
Combined Surveys



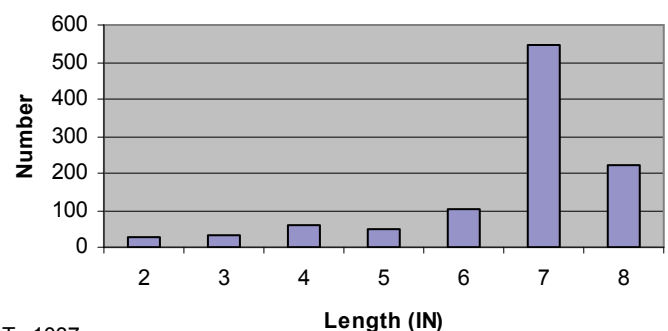
T= 206

Northern Pike
Length Distribution
Dry Dam Lake, 2010



T= 10

Bluegill Length Distribution
Dry Dam Lake, 2010
Combined Surveys



T= 1037

night . Yellow perch ranged from 2.7 to 11.8 inches and averaged 6.2 inches. Electrofishing CPE was 2.6 per mile of shoreline and 13.5 per net night for netting CPE. Pumpkinseed sunfish (64) were also found in Dry Dam Lake.

Past and Future Management:

The Wisconsin Conservation Department Surface Water Publication dated 1961 lists Dry Dam Lake as a 28.5 acre seepage lake with a maximum depth of 4 feet. At the time, the lake was subject to complete winter fish kills and had problems with fluctuating water levels. Since that time water levels have risen sharply, eliminating fish kills. Today, Hennessey Springs supplies Dry Dam Lake with variable amounts of water. During wet periods Dry Dam Lake outlets to the Willow River. During dry periods lake levels drop, the outlet stream dries and public access is lost. There are no public records of stocking, however private stocking most like occurred during high water years resulting in a significant fishery.

Over the years a private hunting club regulated access and limited club members to catch and release angling. During high water years, non membership anglers discovered a legal access through the outlet stream and fishing pressure and harvest became heavy. Anglers concerned about over harvest pushed for total catch and release regulations, however modifications to the proposal resulted in a 10 bag on pan fish, an 18 inch size limit on bass with a bag limit of one and a 32 inch size limit on northern pike with a bag limit of one.

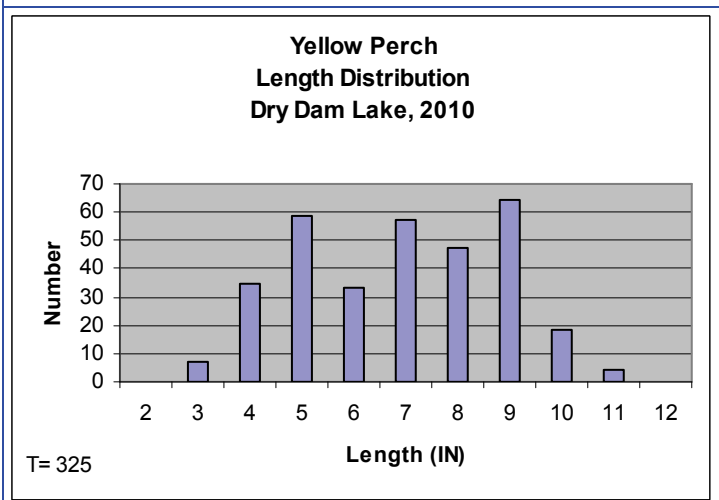
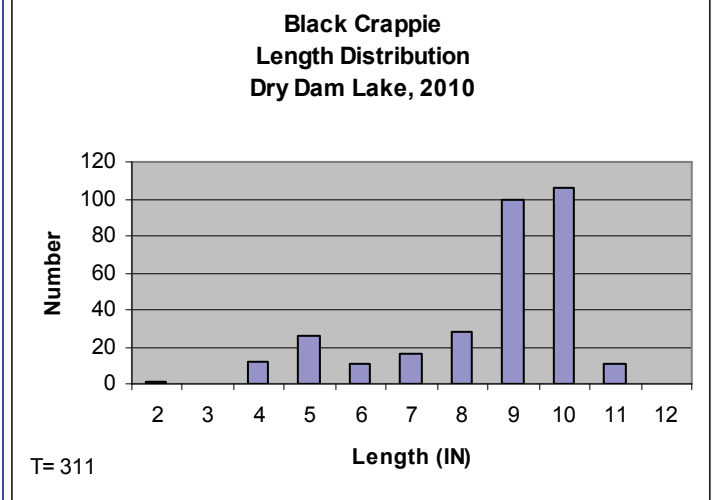
Prior to 2007 there were no documented fish surveys conducted on Dry Dam Lake. During high water years of 2007 –2009 when public access was available the Department conducted electro-fishing surveys to determine the status of the pan fish population. During the spring of 2010 a comprehensive fish survey was completed.

Largemouth bass electro-fishing catch rates over 75 per mile are considered high in this part of the state and are often associated with poor size structure. Dry Dam Lake’s bass population exhibits poor size structure in spite of an 18 inch size limit. No bass were captured over 15.5 inches. Bass growth rates are average through age 5, however drop below average by age 6, indicating older fish have growth and survival problems. Bass condition measured as relative weight are normal.

Northern pike densities in Dry Dam Lake are considered low but those present are of high quality. Growth and condition factors are excellent.

Bluegill are abundant in Dry Dam Lake and it provides one of the best pan fisheries in the county for quality size bluegill. Growth rates tend to exceed the state average and condition factors are normal.

Black crappie and yellow perch are considered to be common in Dry Dam Lake. Both species provide high quality fishing opportunities and have good growth and condition factors.



Management Recommendations:

Given the small size of this waterbody, heavy fishing pressure and harvest during years when public access is available, protective regulations are recommended. The 10 bag on pan fish appears appropriate for Dry Dam Lake. In addition, the 32 inch size limit and bag limit of one for northern pike also appears appropriate. However, the 18 inch size limit and bag limit of one for largemouth bass appears inappropriate for this lake. While most lakes in the area have fast to above average growth, Dry Dam has only average to slow growth. Over harvest of sublegal bass does not appear to be a problem. On-the-other-hand over abundance of small bass and a bottleneck in the food supply for larger bass appears to be a more likely scenario. Such problems of over abundance are better addressed by a different regulation. Two options should be considered; option one eliminate the bass size limit and option 2, install a 14-18 inch protected slot size limit and bag limit of 3. While Option 1 allows harvest of small bass it does little to promote quality fishing opportunities. Option 2 is currently being pursued on several other lakes in the are and may have countywide possibilities. Such a regulation would allow abundant small bass to be harvested reducing competition for food resources and promote increases in growth rates. Increased growth rates should improve recruitment to larger sizes and improve fishing quality.

Table 1: Summary of Fish Species Collected

Gamefish	No. Caught	Max. Size	No. ≥ 21 in	No. ≥ 28 in
Northern Pike	10	37.1	9	8
	No. Caught	Max. Size	No. ≥ 12 in	No. ≥ 15 in
Largemouth Bass	206	15.5	73	3
Smallmouth Bass	1	14.4	1	0
Panfish	No. Caught	Max. Size	No. ≥ 8 in	No. ≥ 10 in
Black Crappie	311	11.8	246	116
Yellow Perch	325	11.8	135	22
	No. Caught	Max. Size	No. ≥ 6 in	No. ≥ 8 in
Bluegill	1037	8.8	879	204
Pumpkinseed	64	8.7	23	5
Other Species	No. Caught			
Yellow Bullhead	42			
Golden Shiner	16			
White Sucker	5			
Central Mudminnow	7			

For more information on Dry Dam Lake, you can contact the following persons:

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