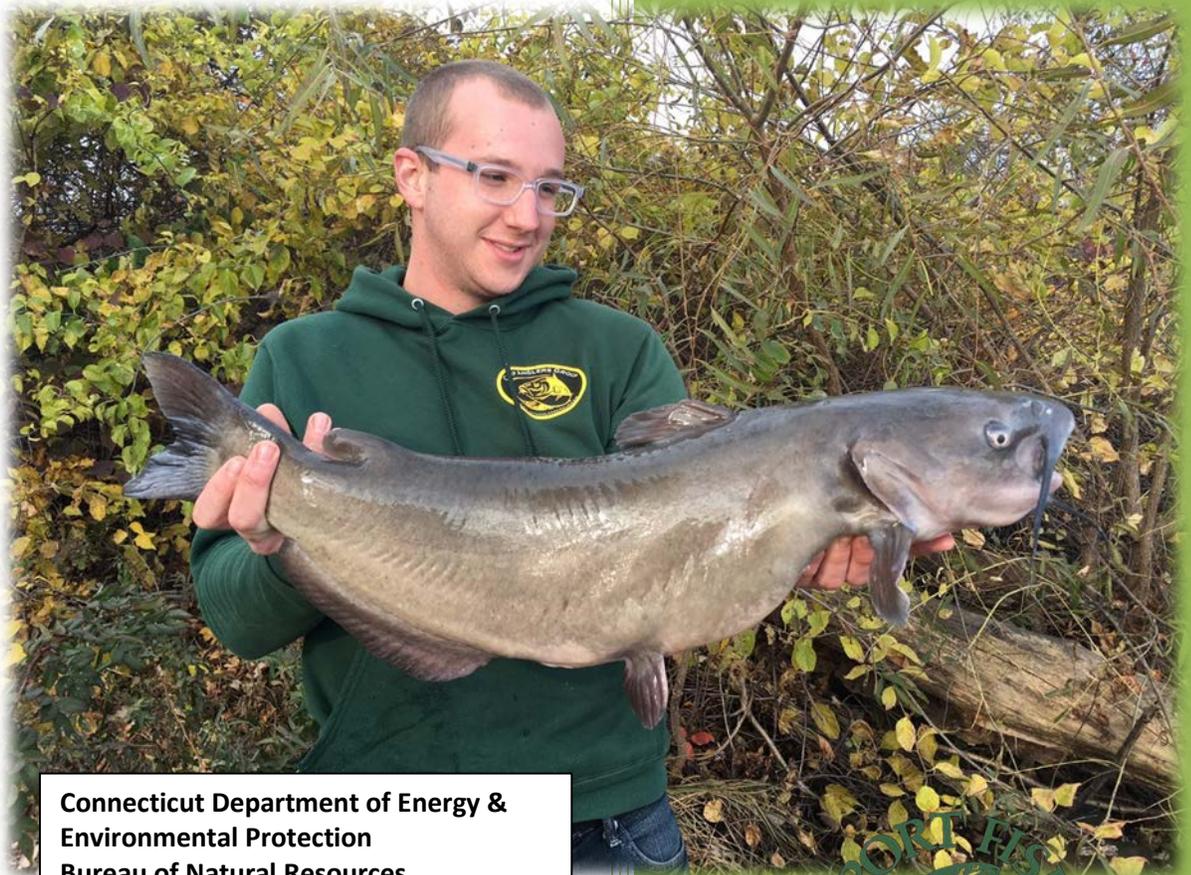


Federal Aid in Sport Fish Restoration
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Annual Performance Report

2016-17

Connecticut Fisheries Division

Channel Catfish Management



Connecticut Department of Energy &
Environmental Protection
Bureau of Natural Resources
Fisheries Division
79 Elm Street, Hartford, CT 06106
860-424-3474
www.ct.gov/deep/fishing
www.facebook.com/ctfishandwildlife





State of Connecticut
Department of Energy and Environmental Protection
Bureau of Natural Resources
Fisheries Division



Grant Title: Inland Fisheries Research and Management
Study 2: Warmwater Fisheries Program
Job 7: Channel Catfish Management

Period Covered: April 1, 2016 to March 31, 2017

Report Prepared by: Neal Hagstrom

Job Personnel: Justin Davis, Co-Job Leader
Neal Hagstrom, Co-Job Leader
Gerald Leonard, Primary Staff
Eileen O'Donnell, Project Leader
Robert Jacobs, Program Coordinator
Timothy Barry, Assistant Program Coordinator

Date Submitted: September 4, 2017

Approved by: Peter Aarrestad
Director, Fisheries Division

William Hyatt
Chief, Bureau of Natural Resources



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Cover photo: Edwin Stackhouse Finch with a 14lb Channel Catfish caught at Batterson Pond in 2016. Photo from Iain Sorrell.

Summary

In Connecticut, Channel Catfish occur in naturalized riverine populations and in a number of Catfish Management Lakes (CMLs) that are annually stocked with commercially raised catfish by the Connecticut DEEP Fisheries Division (FD). The naturalized catfish population in the Connecticut River has considerable untapped fishery potential; the status of populations in other large river systems in the state is unclear. The FD Channel Catfish stocking program has grown from 12 CMLs in 2007 to now include 26 managed waters. This report documents completion of annual stocking objectives and preparations for the 2017 stockings.

Background

Since the late 1970s, the Connecticut River has supported a naturalized Channel Catfish population (Jacobs et al. 2004). Angler surveys of the Connecticut River in 1997-98 (Howell and Molnar 1999) and 2007-8 (Davis et al. 2011) revealed that catfish species (predominantly Channel Catfish) supported a popular targeted fishery. In the most recent survey, anglers spent an estimated 20,000 hours annually fishing for catfish species (8% of total annual effort), caught 30,000 catfish and harvested 60% of those fish (Davis et al. 2011). Channel Catfish (hereafter referred to as “catfish”) have historically not been a major component of lake and pond fisheries in Connecticut. However, some catfish caught from public lakes have been very large (including the current state record of 29 lbs 6 oz caught from Mashapaug Lake) indicating that catfish can survive and grow to substantial sizes in Connecticut waters.

Catfish stockings can create fishing opportunities in small urban ponds (Stuewe 1999), and therefore represent a promising option to expand fishing opportunities for residents living in densely populated areas (Barry et al. 2011). Recognizing this potential, the FD initiated a catfish stocking program in 2007.

The FD’s catfish stocking program began in 2007 at 11 CMLs (see Fig. 1.). Four CMLs were stocked with large (14-18 inch) adult catfish to create “put-and-take” fisheries that would provide immediate opportunities for anglers to catch and



FD Biologist Justin Davis with a large Channel Catfish collected from the Connecticut River in 2012. Photo by Neal Hagstrom.

harvest large catfish. Six “put-and-grow” CMLs were stocked with smaller (9-11 inch) yearling catfish. Two CMLs (Lakewood Lake and Lake Wintergreen) were stocked with both adult and yearling fish. See Davis et al. 2016 for a detailed review of the program. The program has been expanded several times to add additional waterbodies.

The purpose of this report is to summarize catfish-related work conducted during 2016-17.

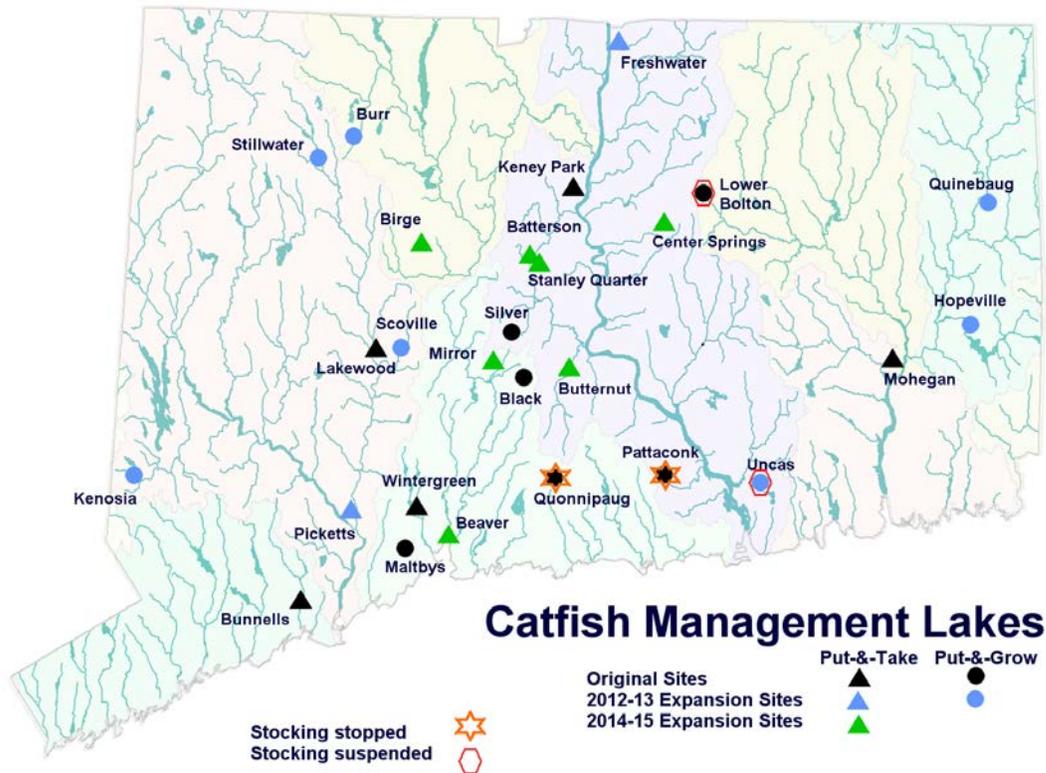


Figure 1. Locations of Catfish Management Lakes in Connecticut.

Note: The Connecticut DEEP Inland and Marine Fisheries Divisions were merged into a single Fisheries Division in January of 2017. Although the majority of the work for this report was conducted while we were still Inland Fisheries, the new designation has been incorporated herein.

Findings

Currently, there are a total of 28 CMLs; 14 Put-and-Take CMLs, 14 Put-and-Grow CMLs, and two waterbodies (Lakewood Lake and Lake Wintergreen) that are stocked with both sizes of fish. In 2016, a total of 26 CMLs were successfully stocked with catfish at rates of 3-75 adults/acre

and/or 3-11 yearlings/acre (Appendices 1 and 2). Only 30 adult catfish were stocked into Mirror Lake in 2016 due to poor water quality (dense algal bloom and recent fish kill). The remainder of fish (370 adults) scheduled for Mirror Lake were stocked into Silver Lake.

Lower Bolton Lake was not stocked with catfish again in 2016 at the request of the town of Bolton (See Davis et al. 2016 for discussion of situation).

Recommendations

- Stock Channel Catfish in Connecticut’s CMLs as resources and time permits.
- Resume stocking catfish in Lower Bolton Lake in 2017.

Expenditures

Total Cost:	89,564
Federal Share:	67,173
State Share:	22,391

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Appendices

Appendix 1. Numbers of adult Channel Catfish stocked annually into Connecticut Catfish Management Lakes. Stocking rates (per acre) appear in parentheses next to numbers of adults stocked. Note that Lakewood Lake and Lake Wintergreen also received annual stockings of yearling catfish (see Appendix 2).

Lake	Acres	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Original Lakes											
Bunnells Pond	42	1,500 (36)	1,500 (36)	1,500 (36)	1,500 (36)	1,500 (36)	1,000(24)	1,080 (26)	750 (18)	800 (19)	800 (19)
Keney Park Pond	3	750(250)	500 (167)	500 (167)	500 (167)	500(167)	250 (83)	600(200)	300(100)	275 (92)	225 (75)
Lakewood Lake	60		1,250 (21)	1,250 (21)	1,250 (21)	1,250 (21)	915 (15)	1,180 (20)	800 (13)	800 (13)	900 (15)
Mohegan Park Pond	14	750 (54)	750 (54)	750 (54)	750 (54)	750 (54)	250 (18)	600 (43)	550 (39)	685 (49)	625 (45)
Wintergreen Lake	58	1,500 (26)	1,200 (21)	1,200 (21)	1,200 (21)	1,200 (21)	900 (16)	1,080 (19)	800 (14)	800 (14)	900 (15)
Silver Lake	146										370 (3)*
2012 Expansion Lakes											
Freshwater Pond	8						500 (63)	540 (68)	400 (50)	500 (63)	350 (44)
Pickett's Pond	9						500 (56)	600 (67)	400 (44)	400 (44)	450 (50)
2014 Expansion Lakes											
Beaver Park Lagoon	9								400 (44)	350 (39)	400 (44)
Birge Pond	12								550 (46)	450 (38)	450 (38)
Butternut Park Pond	3								200 (67)	200 (67)	150 (50)
Center Springs Park Pond	6									325 (54)	225 (38)
Mirror Lake	7								350 (50)	300 (43)	30 (4)*
Stanley Quarter Park Pond	6								300 (50)	275 (46)	300 (50)
SUM		4,500	5,200	5,200	5,200	5,200	4,315	5,680	5,800	6,160	6,175

* 370 adult catfish were diverted from Mirror Lake to Silver Lake due to poor water quality.

Appendix 2. Numbers of yearling Channel Catfish stocked annually into Connecticut’s Catfish Management Lakes. Stocking rates (per acre) appear in parentheses next to numbers of yearlings stocked. Note that Lakewood Lake and Lake Wintergreen also received annual stockings of adult catfish (see Appendix 1).

Lake	Acres	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Original Lakes											
Black Pond	76	1,216 (16)	1,200 (16)	1,200 (16)	700 (9)	1,200 (16)	1,448 (19)	875 (12)	725 (10)	760 (10)	760 (10)
Lower Bolton Lake	175	2,836 (16)	2,800 (16)	2,800 (16)	2,800 (16)	2,800 (16)	2,667 (15)				
Maltby Lake #2	19	355 (19)	350 (18)	350 (18)	350 (18)	350 (18)	365 (19)	210 (11)	215 (11)	190 (10)	205 (11)
Maltby Lake #3	23	355 (15)	350 (15)	350 (15)	350 (15)	350 (15)	407 (18)	210 (9)	235 (10)	225 (10)	230 (10)
Pattaconk Lake	56	748 (13)	800 (14)	800 (14)	800 (14)	800 (14)	839 (15)	700 (13)	720 (13)		
Quonnipaug Lake	99	1,233 (12)	1,250 (13)	1,250 (13)	1,250 (13)	1,250 (13)					
Silver Lake	146	2,419 (17)	2,400 (16)	2,400 (16)	2,400 (16)	2,400 (16)	2,251 (15)	1,750 (12)	1,500 (10)	1,500 (10)	1,365 (9)
Wintergreen Lake	58	758 (13)	750 (13)	750 (13)	750 (13)	750 (13)	750 (13)	700 (12)	720 (12)	580 (10)	615 (11)
2012 Expansion Lakes											
Hopeville Pond	137						2,138 (16)	1,050 (8)	1,285 (9)	1,370 (10)	1,385 (10)
Lake Kenosia	60						1,516 (25)	875 (15)	695 (12)	600 (10)	545 (9)
Quinebaug Lake	88						1,662 (19)	1,050 (12)	1,290 (15)	880 (10)	545 (6)
Stillwater Pond	100						1,731 (17)	875 (9)	930 (9)	1,000 (10)	1,200 (12)
2013 Expansion Lakes											
Batterson Park Pond	140							875 (6)	285 (2)	425 (3)	410 (3)
Burr Pond	85							1,225 (14)	825 (10)	850 (10)	900 (11)
Lakewood Lake	60							2,835 (47)	627 (10)	600 (10)	680 (11)
Scoville Reservoir	121							1,575 (13)	1,147 (9)	1,200 (10)	1,180 (10)
Uncas Lake	69							1,050 (15)			
SUM		9,920	9,900	9,900	9,400	9,900	15,774	15,855	11,199	10,180	10,700