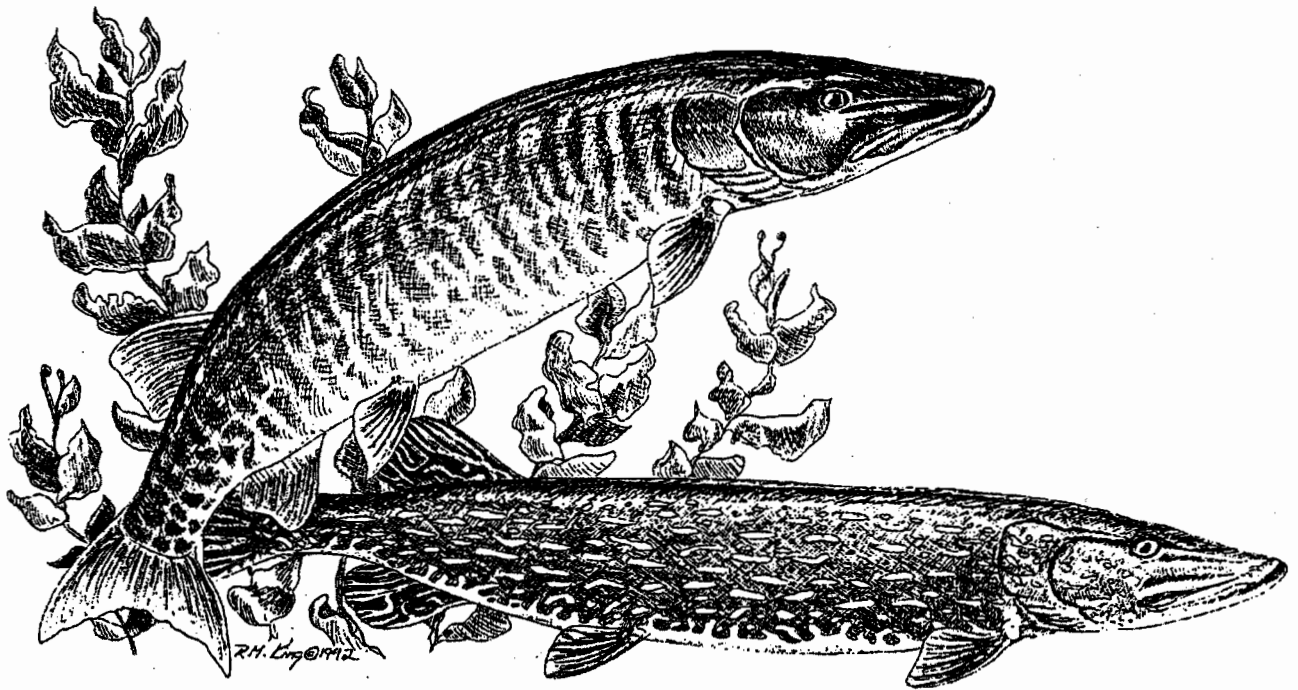


Esocid Technical Committee

*A Synopsis of
Angling Regulations for Esocids in North America*



North Central Division
American Fisheries Society

1997

TABLE OF CONTENTS

INTRODUCTION	i
Summary of Northern Pike Length Limits.....	ii
Summary of Muskellunge Length Limits	iii
 ANGLING REGULATIONS - UNITED STATES	
Alaska	1
Arkansas	3
Colorado	4
Delaware	7
Illinois.....	8
Indiana.....	9
Iowa.....	11
Kansas.....	13
Kentucky.....	14
Maryland.....	16
Massachusetts	17
Michigan	18
Minnesota	22
Missouri	26
Montana	28
Nebraska	30
New York	33
North Dakota	39
Ohio	40
Oklahoma	42
Pennsylvania	43
South Dakota	45
Tennessee	46
Vermont	48
Wisconsin	49
 ANGLING REGULATIONS - CANADA	
Alberta	53
Manitoba	55
Northwest Territories	57
Ontario	58
Saskatchewan	62
Yukon	64

INTRODUCTION

The Esocid Technical Committee of the American Fisheries Society/North Central Division compiled a synopsis of esocid research and management in 1992. Interest in compiling another synopsis focusing on angling regulations for esocids was generated at the mid-year (July) meeting of the Committee in 1994.

An inquiry letter and questionnaire regarding esocid angling regulations was sent under Esocid Technical Committee letterhead to 35 state or provincial resource management agencies within the range of esocids on 30 November 1995. Information requested included esocid species present, range/distribution, history of angling regulations, current angling regulations, rationale for regulations, evaluations/case histories of regulations, and a contact person for further information.

Responses were received from 30 of the 35 agencies throughout 1996 and 1997. Information received was compiled and summarized in a consistent format which is presented herein.

This synopsis is not a complete reference regarding esocid regulations but is intended to be an informational document for persons interested in esocid harvest management which will provide an overview of angling regulations throughout the range of esocids in North America and serve as a network for exchange of information.

**Summary of Length Limit Angling Regulations
Northern Pike**

(Number of States/Provinces with Specific Regulation)

<u>Length Limit*</u>	<u>Standard Regulation</u>	<u>Quality (Trophy) Regulation</u>
None	18	
18" minimum	1	
20" minimum	2	
22" minimum		1
24" minimum	6	
26" minimum	1	1
28" minimum	1	
30" minimum	2	1
1 over 30" bag	1	2
30" maximum		1
32" minimum		1
36" minimum		2
30-40" protected slot		3
40" minimum		1
42" minimum		1

* - does not include experimental regulations; see state/provincial regulations synopsis, especially Minnesota

**Summary of Length Limit Angling Regulations
Muskellunge**

(Number of States/Provinces with Specific Regulation)

<u>Length Limit</u>	<u>Standard Regulation</u>	<u>Quality (Trophy) Regulation</u>
30" minimum	10	
34" minimum	2	
36" minimum	4	
40" minimum	1	3
42" minimum	1	2
44" minimum		2
45" minimum		2
48" minimum		2
50" minimum		1
52" minimum		1
Catch and Release Only		1

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Alaska

Specie: Northern Pike

Native or Introduced / Range:

Native to many lakes, streams and rivers of the Arctic-Yukon- Kuskokwim Region (AYK) which includes the interior, western and north slope. Abundant in AYK with the exception of the north slope. Introduced to areas of south central Alaska where spread to new waters is of concern to fishery managers.

History of Angling Regulations:

Concern over the level of harvest of some populations within AYK prompted the Alaska Department of Fish and Game (ADF&G) to initiate studies of northern pike stocks in the major fisheries in 1985. As a result of these studies ADF&G responded to stock declines due to over fishing by recommending to the Alaska Board of Fisheries more restrictive angling regulations for northern pike beginning in 1987.

Current Angling Regulations (1997)

Open Season(s):

General - open all year; use of spear or bow and arrow open all year if completely submerged, September 1 through April 30 if not completely submerged

Tanana River drainage - June 1 through March 31, except Tolovana and Chatanika Drainages - June 1 through October 14. Use of spears and bow and arrow June 1 through March 31 if person is completely submerged, September 1 through March 31 if not completely submerged

Harding Lake - closed to spear or bow and arrow

Kvichak, Naknek, Brooks, and Ungalikthluk Rivers - June 8 through April 9

King Salmon and Paul's Creeks - August 1 through May 31

Little Susitna River, Meadow and Wasilla Creeks, Wolverine Lake - June 15 through April 14

Long and Wishbone Lakes - May 1 through October 31

Length Limit(s):

General - None

Tanana River Drainage - only one over 30 inches except Harding Lake - 26 inches minimum

Yukon River Drainage between the Tanana and Hodzana Rivers and Trans-Alaska Pipeline Corridor - only one over 30 inches

Daily Bag Limit(s):

General - unlimited

Tanana River Drainage and Trans-Alaska Pipeline Corridor - 5

Yukon River Drainage - 10, except between the Tanana and Hodzana Rivers - 5

Northwestern, North Slope, and Kuskokwim-Goodnews Areas - 10

Possession Limit(s):

same as daily bag limit

Rationale for Angling Regulations:

Reduce overall harvest of northern pike within AYK

Eliminate winter harvest of heavy concentrations of large females within the Minto Flats wetland

Increase the number of large spawning fish within the Tanana River drainage

Reduce harvest of smaller northern pike in Harding Lake to allow population to recover

Evaluations / Case Histories of Regulation Impacts:

None provided

Contributor (Name, Address, Phone, FAX):

Don Roach, Fishery Biologist

Alaska Department of Fish and Game

1300 College Rd.

Fairbanks, AK 99701-1599

Phone: (907) 459-7207

FAX: (907) 456-2259

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Arkansas

Specie(s): Grass Pickerel, Chain Pickerel, Northern Pike, Hybrid Muskellunge

Native or Introduced / Range:

Grass Pickerel - Native, found statewide with the exception of the extreme Ozark Uplands

Chain Pickerel - Native, generally limited to lakes and streams in southern and eastern Arkansas

Northern Pike - Introduced experimentally as potential predators for sunfish and shad in several lakes and reservoirs during the 1970's. Did not establish reproducing populations.

Hybrid Muskellunge - Introduced to Ashbaugh Lake and Spring River Lake (both in northern Arkansas) as recently as 1994. Ashbaugh Lake record; 13 lbs. 13 oz. - 1985. Spring River Lake record; 23 lbs. 12 oz. - 1995.

History of Angling Regulations:

Same since at least 1975

Current Angling Regulations (1996)

Open Season(s):

Open all year

Length Limit(s):

None - all esocids

Daily Bag Limit(s):

6 of each species (possession limits - double the daily bag limits)

Rationale for Angling Regulations:

Currently monitoring Spring River hybrid muskellunge fishery with intent of assessing need for reduced daily bag limit or imposition of length limit.

Non-native esocids tend to flourish for several years following stocking and then die. Lifespan may be shortened by increased metabolism due to warmer waters and long growing seasons.

Evaluations / Case Histories of Regulation Impacts:

None

Contributor (Name, Address, Phone, FAX):

April Ralston Layher, Staff Biologist

Arkansas Game and Fish Commission - Fisheries Division

2 Natural Resources Drive

Little Rock, AR 72205

Phone: (501) 223-6320

FAX: (501) 223-6461

Email: aolayher@agfc.state.ar.us

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Colorado

Specie(s): Muskellunge

Native or Introduced / Range:

First introduced in 1992

History of Angling Regulations:

Muskellunge are currently being established in a private reservoir for future broodstock. No angling opportunities will be provided for muskellunge.

Current Angling Regulations (1996)

Open Season(s):

None

Length Limit(s):

N/A

Daily Bag Limit(s):

N/A

Rationale for Angling Regulations:

Emphasis on muskellunge is development of broodstock only at this point

Evaluations / Case Histories of Regulation Impacts:

None

Contributor (Name, Address, Phone, FAX):

Keith Koupal

Colorado State University

108 Wayar

Ft. Collins, CO 80521

Phone: (970) 223-0835

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Colorado

Specie(s): Hybrid Muskellunge

Native or Introduced / Range:

Hybrid muskellunge were first introduced in 1983

History of Angling Regulations:

A minimum length limit of at least 30 inches has been maintained since introduction of hybrid muskellunge for most waters. Minimum length limits have been raised to 36 or 40 inches on select waters. The daily bag limit has been stable at 1 fish. Possession limit is 2 fish.

Current Angling Regulations (1996)

Open Season(s):

Open all year

Length Limit(s):

30 inch minimum statewide; selected waters have a 36 or 40 inch minimum

Daily Bag Limit(s):

one (possession - 2)

Rationale for Angling Regulations:

These fish are being protected to enhance their trophy status and to allow them time to help reduce the biomass of "rough fish (western white sucker and common carp). Higher minimum length limits have been placed on some waters displaying good growth rates.

Evaluations / Case Histories of Regulation Impacts:

None

Contributor (Name, Address, Phone, FAX):

Keith Koupal
Colorado State University
108 Wayar
Ft. Collins, CO 80521
Phone: (970) 223-0835

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Colorado

Specie(s): Northern Pike

Native or Introduced / Range:

Northern pike are an introduced specie. The first introductions occurred in 1966.

History of Angling Regulations:

Regulations through the 1970's consisted of a 16 inch minimum length limit/3 daily bag limit. The length limit was reduced to 14 inches during the 1980's. There are currently no minimum length or bag limit restrictions statewide except for a few selected waters.

Current Angling Regulations (1996)

Open Season(s):

Open all year

Length Limit(s):

No restrictions statewide except for one reservoir where a protected slot limit requires immediate release of all northern pike between 26 and 34 inches.

Daily Bag Limit(s):

No restrictions statewide except for two reservoirs - 10 fish daily bag limit (only one > 34")

Rationale for Angling Regulations:

Statewide length and bag limit restrictions for northern pike were removed following introduction of hybrid muskellunge as a trophy angling opportunity and concerns over the loss of native fish species due to northern pike. Northern pike populations in waters at higher elevations in Colorado have been found to prey heavily on native fish species, particularly salmonids, and compete with native predators. Some of the affected species are threatened or endangered.

Special regulations are designed to remove slow growing northern pike in stunted populations and to promote natural reproduction in situations where control of "rough fish" is still a concern.

Evaluations / Case Histories of Regulation Impacts:

None

Contributor (Name, Address, Phone, FAX):

Keith Koupal

Colorado State University

108 Wayar

Ft. Collins, CO 80521

Phone: (970) 223-0835

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Delaware

Specie(s): Redfin Pickerel, Chain Pickerel, Hybrid Muskellunge

Native or Introduced / Range:

Redfin and Chain Pickerel - Native throughout Delaware

Hybrid Muskellunge - non-native but present in several streams in the northernmost part of the state; probably migrants from Pennsylvania waters (stocked)

History of Angling Regulations:

1941 - Open season June 25 to the following March 1; hook and line only; minimum length limit - 10 inches; daily bag limit - 6. Sometime between 1941 and 1970's all were repealed except the hook and line only restriction.

Current Angling Regulations (1996)

Open Season(s):

Open all year

Length Limit(s):

None

Daily Bag Limit(s):

Unlimited

Possession Limit(s):

Unlimited

Rationale for Angling Regulations:

Unknown

Evaluations / Case Histories of Regulation Impacts:

A minimum length limit of 25 inches was put in place for one impoundment (Garrison Lake) in 1978 during a three-year project to evaluate stocking of hybrid (tiger) muskellunge for the control of rough fish. No hybrid muskellunge were ever collected or caught by anglers. The regulation was rescinded in 1984.

Contributor (Name, Address, Phone, FAX):

Catherine C. Martin, Fisheries Biologist

Delaware Department of Natural Resources and Environmental Control

Division of Fish and Wildlife

Aquatic Resources Education Center

4876 Hay Point Landing Road

Smyrna, DE 19977

Phone: (302) 653-2882

FAX: (302) 653-3431

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Illinois

Specie(s): Muskellunge (Pure and Hybrid), Northern Pike

Native or Introduced / Range:

Muskellunge are an introduced specie. Originally looked at three pure muskellunge strains; 1 Ohioensis and 2 Mississippi drainage. Ohio strain did the best. Now have broodstock lakes. Northern pike populations are currently found in about 15 waters.

History of Angling Regulations:

Muskies first stocked in Illinois in the late 1970's coupled with a 30" minimum length limit and one daily bag. The minimum length limit was increased to 36" on 12 lakes stocked with pure muskellunge in 1992 and increased to 45" in 1996 on 4 lakes stocked with pure muskellunge.

Current Angling Regulations (1996)

Open Season(s):

Open all year

Length Limit(s):

Hybrid muskellunge - 30" minimum - statewide

Pure muskellunge (10 lakes) - 36" minimum

Pure muskellunge (4 lakes) - 45" minimum

Northern Pike - 24" minimum - statewide

Daily Bag Limit(s):

1 per day - all muskellunge, 3 per day - northern pike

Rationale for Angling Regulations:

Insure quality fishing opportunities and trophy potential

Brood source for adults to provide eggs/milt for hatchery system (45" minimums)

Evaluations / Case Histories of Regulation Impacts:

Volunteer anglers annually send in catch records and related information for muskellunge. These reports indicate that approximately 75% of "legal to keep" muskellunge caught are released. Catch and release practices of anglers likely have had a greater impact on maintaining high quality muskellunge fisheries than angling regulations.

Contributor (Name, Address, Phone, FAX):

Jim Mick

Illinois Department of Natural Resources - Division of Fisheries

524 S. 2nd St.

Springfield, IL 62701

Phone: (217) 782-6424

FAX: (217) 785-8262

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Indiana

Specie(s): Muskellunge (Pure and Hybrid)

Native or Introduced / Range:

Historical records indicate that muskellunge were native to several rivers in southern Indiana but current populations are the result of stocking (no natural reproduction). Pure muskellunge are present in two waters; Brookville Reservoir (5260 ac) and Webster Lake (585 ac). Brookville has been stocked since 1974 and Webster Lake since 1981. Indiana Muskies Inc. is developing a rearing operation to stock pure muskellunge into a third lake, Lake-of-the-Woods (416 ac). Hybrid muskellunge were first stocked in 1977. A total of 27 waters have been stocked since then but with few successes. As of 1988 stocking had been scaled back to five lakes with a goal of providing a total catch of one fish per five acres of water annually. Hybrid muskellunge stocking has been discontinued as of 1997.

History of Angling Regulations:

Muskellunge angling regulations have remained steady since first instituted in 1974.

Current Angling Regulations (1997)

Open Season(s):

Open all year

Length Limit(s):

30 inch minimum - pure and hybrid (36" is currently being proposed)

Daily Bag Limit(s):

1 per day - pure or hybrid

Rationale for Angling Regulations:

Provide trophy fishing opportunities

Stabilize egg sources for hatchery production (pure muskellunge)

Evaluations / Case Histories of Regulation Impacts:

None of regulation impacts but several angler harvest surveys. Estimated harvest at Brookville was 72 fish - 1982, 17 - 1983, 39 - 1984 while at Webster Lake anglers harvested an estimated 67 muskellunge in 1987 (201 caught). Overall demand is very low but a few dedicated anglers (Muskies Inc. largely). Acceptance of muskellunge stocking is high however.

Contributor (Name, Address, Phone, FAX):

Edward R. Braun, Fisheries Biologist
Indiana Department of Natural Resources
Tri-Lakes Fisheries Station
5570 N Fish Hatchery Rd.
Columbia City, IN 46725-9317

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Indiana

Specie(s): Northern Pike

Native or Introduced / Range:

Native to many of northern Indiana's glacial lakes and larger rivers. Self-sustaining populations exist in 119 lakes and 9 rivers in this part of the state. Loss of spawning habitat has been identified as the biggest threat to self-sustaining populations and management efforts are focused on identification and protection of these habitats. Northern pike have been introduced to 35 lakes and reservoirs primarily in the southern part of the state.

History of Angling Regulations:

Angling regulations for northern pike have remained the same for many years. The exact date of promulgation is unknown.

Current Angling Regulations (1996)

Open Season(s):

Open all year

Length Limit(s):

20 inch minimum - statewide

Daily Bag Limit(s):

3

Rationale for Angling Regulations:

Protect adults until they have spawned at least once.
Distribute catch

Evaluations / Case Histories of Regulation Impacts:

None for regulation but angler harvest has been monitored at four lakes since 1984. Both harvest and demand were low in all surveys.

Contributor (Name, Address, Phone, FAX):

Edward R. Braun, Fisheries Biologist
Indiana Department of Natural Resources
Tri-Lakes Fisheries Station
5570 N. Fish Hatchery Rd.
Columbia City, IN 46725-9317

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Iowa

Specie(s): Muskellunge

Native or Introduced / Range:

All populations are introduced and currently present in 7 lakes in northwest Iowa. Most waters are stocked annually with muskellunge fingerlings reared at the Spirit Lake Hatchery.

History of Angling Regulations:

Current regulations have been in effect since 1991. Prior to that a minimum length limit of 30 inches was in effect.

Current Angling Regulations (1997)

Open Season(s):

Open all year except in West Okoboji, East Okoboji, and Spirit Lakes where it is open May 21 through February 14

Length Limit(s):

36 inch minimum - statewide

Daily Bag Limit(s):

1 per day

Possession Limit(s):

1 in total

Rationale for Angling Regulations:

Initial length limits were implemented to allow muskellunge to reach sexual maturity. Increased minimum length limit in 1991 was an attempt to more adequately foster trophy management. Regulations are also intended to protect muskellunge brood stock for hatchery operations.

Evaluations / Case Histories of Regulation Impacts:

None for regulations specifically but information available regarding population dynamics, life history and communications with local Muskies Incorporated chapter for catch reporting.

Contributor (Name, Address, Phone, FAX):

Jim Christianson, Fish Management Biologist
Iowa Department of Natural Resources - Northwest Region
122 252nd Avenue
Spirit Lake, IA 51360
Phone: (712) 336-1840
FAX: (712) 336-0921

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Iowa

Specie(s): Northern Pike

Native or Introduced / Range:

Native statewide and found in about 50 lakes and 10 river systems. Some populations are self-sustaining, however, many are maintained through stocking.

History of Angling Regulations:

Quite stable regulations for last 30 years with exception of some minor changes in open season dates and a 24 inch minimum length limit which was in effect for several years during the early 1960's.

Current Angling Regulations (1996)

Open Season(s):

Interior Streams and Lakes - open all year except for East and West Okoboji and Spirit Lake which are open from the Saturday nearest May 1 through February 15.

Boundary Waters - Mississippi, Missouri and Big Sioux Rivers - Open all year

Iowa/Minnesota boundary waters - Open April 28 through February 15

Length Limit(s):

None - statewide

Daily Bag Limit(s):

Interior Lakes and Streams - 3 (possession limit 6)

Boundary Waters - Mississippi, Missouri and Big Sioux Rivers - 5 (possession limit 10)

Iowa/Minnesota boundary waters - 3 (possession limit 6)

Rationale for Angling Regulations:

Provide a top predator fishery

Increase predator diversity

Evaluations / Case Histories of Regulation Impacts:

Various in-house investigations

Contributor (Name, Address, Phone, FAX):

Jim Christianson, Fish Management Biologist

Iowa Department of Natural Resources - Northwest Region

122 252nd Avenue

Spirit Lake, IA 51360

Phone: (712) 336-1840

FAX: (712) 336-0921

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Kansas

Specie(s): Northern Pike

Native or Introduced / Range:

Frank Crosses' "Fishes of Kansas" speculates that northern pike were probably native to extreme northeast Kansas historically and that grass pickerel were found on the Missouri River at St. Joseph. It is questionable whether any native populations of esocids exist today. A northern pike stocking program was undertaken in the late 1970's but was discontinued within four years due to very poor survival. There are still several impoundments where an occasional northern pike is caught. These fish are the result of natural reproduction.

History of Angling Regulations:

A 30 inch minimum length limit was established during initial introduction efforts and is still in effect currently but Kansas no longer actively manages for northern pike.

Current Angling Regulations (1996)

Open Season(s):

Open all year

Length Limit(s):

30 inch minimum - statewide

Daily Bag Limit(s):

2 - statewide

Rationale for Angling Regulations:

Protect initial introductions in effort to establish populations

Evaluations / Case Histories of Regulation Impacts:

None

Contributor (Name, Address, Phone, FAX):

Douglas D. Nygren, Chief, Fisheries Section
Kansas Department of Wildlife and Parks
Operations Office
512 SE 25th Avenue
Pratt, KS 67124-8174
Phone: (316) 672-5911
FAX: (316) 672-6020

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Kentucky

Specie(s): Muskellunge, Northern Pike, Chain Pickerel, Grass Pickerel

Native or Introduced / Range:

Muskellunge are native to Kentucky primarily in streams. Populations currently exist in 18 streams in southcentral, eastern and northeastern Kentucky as well as three reservoirs (Buckhorn, Cave Run and Green River). Large muskellunge fingerlings (8-9") are stocked annually into most of the streams to supplement their populations. The muskellunge fishery in the three reservoirs is maintained through annual stockings of 13-15" long muskellunge. No natural reproduction has been documented in the reservoirs. Some "early" muskellunge stockings were of fish obtained from West Virginia, which had obtained some of their stock from Pennsylvania; these fish were assumed to be of the "ohioensis" strain. Since the construction of the Minor Clark Fish Hatchery in the early 1970's, native brood stock have been utilized for rearing and stocking.

Northern Pike are not native to Kentucky. They have (rarely) shown up in the Ohio River and some of its tributary streams. They have also been stocked into several pay lakes and private lakes.

Chain Pickerel are found in some oxbow lakes along the lower Ohio or Mississippi Rivers bordering a few counties in far western Kentucky. They are not specifically managed.

Grass Pickerel are common within the western half of the state and are occasionally found in the eastern half of the state. They are not managed and there are no angling regulations for them.

History of Angling Regulations:

Prior to 1943 there were no angling regulations for muskellunge in Kentucky. Minimum length limits were increased from 18 inches in 1946 to 24 inches in 1948, decreased to no minimum length limit in 1955 and then raised to the current 30 inch minimum in 1969. Bag limits have also fluctuated from unlimited to 2 daily (4 possession) in 1952, to 5 daily (10 possession) in 1955 and back to 2 daily (2 possession) since 1982.

Current Angling Regulations (1997)

Open Season(s):

Open all year - all esocids

Length Limit(s):

Muskellunge - 30 inch minimum statewide

Northern Pike/Chain Pickerel - no length limits statewide

Daily Bag Limit(s):

Muskellunge - 2 daily (2 in possession)

Northern Pike - no bag limit restrictions

Chain Pickerel - 5 daily (10 in possession)

Rationale for Angling Regulations:

A 30 inch minimum length limit is something of a compromise position, particularly in streams. It does not protect all muskellunge until maturity but most until about age IV. Natural mortality between age IV and V would result in appreciable loss to the creel if a higher length limit were in place.

Evaluations / Case Histories of Regulation Impacts:

None specifically directed at regulation impacts but numerous department reports are available relative to population status and/or stocking evaluations.

Contributor (Name, Address, Phone, FAX):

Lewis E. Kornman
Minor Clark Fish Hatchery
120 Fish Hatchery Rd.
Morehead , KY 40351
Phone: (606) 784-6872

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Maryland

Specie(s): Chain Pickerel, Northern Pike, Muskellunge (pure and hybrid)

Native or Introduced / Range:

Chain Pickerel are native. Range was once limited to coastal plain freshwater and upper tidal estuaries but past stocking has extended their range to inland lakes and reservoirs statewide.

Northern Pike are not native to Maryland. The earliest known stocking occurred in 1956 when 14 adults were obtained by state officials from commercial fishermen in Sandusky, Ohio and stocked into Deep Creek Lake.

Hybrid (tiger) muskellunge were first stocked in 1978 with fingerlings obtained from US Fish and Wildlife Harrison Lake and stocked into Tridelphia Reservoir and Big Pool.

History of Angling Regulations:

All Esocids - Creel limits in aggregate in 1970 changed to individual limits in 1973

Chain Pickerel - current regulations in effect since 1970 except for creel limit

Northern Pike - 20" minimum length limit (1970) raised to 24" in 1989

Muskellunge (pure and hybrid) - current regulations are more restrictive

Current Non-Tidal Angling Regulations (1996)

Open Season(s):

All Esocids - Open all year

Length Limit(s):

Chain Pickerel - 14" minimum, Northern Pike - 24" minimum

Muskellunge (pure and hybrid) - 36" minimum

Daily Bag Limit(s):

Chain Pickerel - 5, Northern Pike - 2, Muskellunge (pure and hybrid) - 1 in aggregate

Rationale for Angling Regulations:

Northern Pike minimum length limit raised to 24" to allow females to reach maturity before being subject to harvest. Raised minimum length limit and reduced creel limit on muskellunge due to limited abundance and trophy potential.

Evaluations / Case Histories of Regulation Impacts:

None

Contributor (Name, Address, Phone, FAX):

Ed Anamait, Rivers and Reservoirs Manager

Maryland Department of Natural Resources - Freshwater Fisheries Division

Lewistown Work Center, 10932 Putman Rd.

Thurmont, MD 21788

Phone: (301) 898-9724

FAX: (301) 898-5404

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Massachusetts

Specie(s): Chain Pickerel, Northern Pike, Hybrid Muskellunge

Native or Introduced / Range:

Chain pickerel are native.

Northern Pike have been introduced into more than 50 waters but limited information suggests they may be native to the Connecticut River as far back as the 1800's.

Hybrid Muskellunge are introduced, being first stocked in 1981.

History of Angling Regulations:

The open season for all esocids was April 15 to February 15 from 1959 until it was changed to open all year in 1977.

A 12" minimum length limit, 10 daily bag limit was in effect in 1950 for Chain Pickerel. The minimum length limit was increased to 14" in 1952 and the daily bag limit decreased to 5 in 1954.

Northern Pike were subject to a 20" minimum length limit and a 5 daily bag limit from 1950 until 1976 when the current regulations were put in place.

Regulations for Hybrid Muskellunge have been the same since first introduced in 1981.

Current Angling Regulations (1996)

Open Season(s):

All Esocids - Open all year

Length Limit(s):

Chain Pickerel - 15" minimum, Northern Pike and Hybrid Muskellunge - 28"

Daily Bag Limit(s):

Chain Pickerel - 5, Northern Pike and Hybrid Muskellunge - 1 of each

Rationale for Angling Regulations:

Chain Pickerel regulations are in place to prevent over-exploitation and improve population parameters.

Northern Pike and Hybrid Muskellunge regulations are designed to allow limited harvest of trophy size fish.

Evaluations / Case Histories of Regulation Impacts:

None

Contributor (Name, Address, Phone, FAX):

Todd Allan Richards, Assistant Warmwater Project Leader

Division of Fisheries and Wildlife

Field Headquarters

One Rabbit Hill Road

Westborough, MA 01581

Phone: (508) 792-7270 ext.138

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Michigan

Specie(s): Muskellunge (Pure and Hybrid)

Native or Introduced / Range:

Great Lakes Muskellunge (spotted phase): native to the Great Lakes and connecting waters and some landlocked lakes which once had connections to the Great Lakes.

Northern Muskellunge (barred phase): originally native to only a few Gogebic Co. (MI) waters in the Wisconsin and Chippewa River drainages (WI) but subsequently widely distributed to inland lakes statewide from the Gogebic Co. egg source or their progeny.

Hybrid muskellunge are mainly stocked as a special supplementary fish in some inland waters. Abundance is never high but a few spectacular specimens are caught.

History of Angling Regulations:

Following comprehensive review of angling regulations in 1992, the minimum length limit for muskellunge was raised to 42" from a previous 30" minimum. Also recommended a year-round fishing and possession season for muskellunge which has not yet been implemented.

Current Angling Regulations (1997)

Open Season(s):

Upper Peninsula (inland and Gr. Lakes and St. Mary's River): May 15 - February 28

Lower Peninsula (inland waters): Last Sat. In April - March 15

Lower Peninsula (Lakes Michigan, Erie, Huron): Open all year

Lower Peninsula (L. St. Clair, St. Clair R., Detroit R.): First Sat in June - December 15

Wis/ Mich Boundary waters: May 15 - November 30

9 waters: Last Sat. In April - November 30

Brevort Lake: First Sat. In June - February 28

Ice Spearing: January - February (exceptions: not allowed on 50 inland waters as well as L. St. Clair, L. Erie, St. Clair R., Detroit R.)

Length Limit(s):

General statewide - 42" minimum

Wis/Mich Boundary waters - 40" minimum

Daily Bag Limit(s):

all waters - 1

Rationale for Angling Regulations:

Length limits set to emphasize trophy potential. Recommendation to allow year-round possession season makes sense with a minimum length limit which only allows harvest of trophy size fish.

Evaluations / Case Histories of Regulation Impacts:

None provided

Contributor (Name, Address, Phone, FAX):

William McClay, Lake Management Specialist
Michigan Department of Natural Resources - Fisheries Division
P.O. Box 30446
Lansing, MI 48909-7946
Phone: (517) 373-6762

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Michigan

Specie(s): Northern Pike

Native or Introduced / Range:
Native throughout most waters of Michigan

History of Angling Regulations:
Comprehensive review of angling regulations in 1992 resulted in an increase in the statewide minimum length limit for northern pike from 20" to 24". Recommendations to allow year-round angling but a limited possession season for northern pike from May 15 through the end of February have not yet been implemented.

Current Angling Regulations (1997)

Open Season(s):

Upper Peninsula (inland and Gr. Lakes and St. Mary's River) - May 15 - February 28

Lower Peninsula (inland waters) - Last Sat in April - March 15

Lower Peninsula (Gr. Lakes, L. St. Clair, St. Clair R., Detroit R. - Open all year

Wis/Mich Boundary Waters - First Sat. In May - March 1

Ice Spearing - January - February (exceptions: not allowed on 43 inland waters)

Length Limit(s):

General statewide - 24"

No size limit - 27 waters within Michigan as well as Wis/Mich Boundary waters

30" minimum - 5 waters

42" minimum - 8 waters (chain of lakes)

Daily Bag Limit(s):

General statewide - 5 in any combination with largemouth and smallmouth bass, walleye , sauger and flathead and channel catfish (possession limit same as daily bag)

Wis/Mich Boundary waters - 5

Rationale for Angling Regulations:

Angler values about northern pike have shifted away from harvest to catching these fish but not as decisively as for muskellunge and bass. Somewhat larger northern pike are significantly more attractive in the anglers creel than the former 20" minimum. Abundant northern pike may be important in preventing stunting of yellow perch in northern Michigan lakes with poor benthic invertebrate populations.

Evaluations / Case Histories of Regulation Impacts:

None provided

Contributor (Name, Address, Phone, FAX):

William McClay, Lake Management Specialist
Michigan Department of Natural Resources
Fisheries Division
P.O. Box 30466
Lansing, MI 48909-7946
Phone: (517) 373-6762

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Minnesota

Specie(s): Muskellunge (Pure and Hybrid)

Native or Introduced / Range:

Muskellunge are native (Mississippi strain) to Minnesota. Native populations exist in 43 inland lakes, 3 rivers and 5 border waters (Ontario and Wisconsin). Introduced populations of muskellunge are present in 40 lakes. Introduced hybrid muskellunge populations are found in 25 lakes.

History of Angling Regulations:

Historical muskellunge regulations in Minnesota are well documented back to nearly the turn of the century.

Minimum Length Limits:

1914 to 1925 - 30"; 1930 to 1960 - No minimum; 1961 to 1982 - 30"; 1983 to 1986 - 36" (north) and 30" (south); 1987 to 1992 - 36"; 1993 to 1996 - 40"

Exceptions to these minimum length limits include 1) a 48" minimum on 7 broodstock lakes since 1990, 2) reduced length limits on Shoepack Lake, and 3) reduced length limits (30") on lakes in Cook, Lake, Rice, Yellow Medicine, Steele, and Lyon counties during the period 1984-1991.

Daily/Possession Limits:

Possession limits were not in force prior to 1939 but have been the same as the daily bag limit since then.

Daily bag limits in 1914 were 25 fish combined. Daily bag limits for muskellunge were set at 5 from 1921-24, reduced to 2 from 1925-55, and reduced to 1 from 1956 to present.

Current Angling Regulations (1996)

Open Season(s):

First Saturday in June - February 15 (inland waters only)

Length Limit(s):

40" minimum (exceptions are 30" minimum on Shoepack Lake and 48" minimum on 7 brood stock lakes)

Daily Bag Limit(s):

1 (possession same)

Rationale for Angling Regulations:

The early June muskellunge opener was set to protect spawning fish. The statewide minimum length limit of 40" ensures that muskies have had the ability to spawn several times before being subject to harvest. The 48" minimum length limit on brood stock lakes ensures a reliable egg source. Changes in regulations over the past 15 years were based on the biology of the Leech (Mississippi) strain muskellunge.

Evaluations / Case Histories of Regulation Impacts:

Younk, J.A., and R.F. Strand. 1992. Performance evaluation of four muskellunge strains in two Minnesota lakes. Minnesota DNR Investigational Report 418, St. Paul.

Younk, J.A., and M.F. Cook. Current research project (1996-2002). A comparative study of Minnesota muskellunge waters for trophy potential.

Olson, D.E., and P.K. Cunningham. 1989. Sport-fisheries trends shown by an annual Minnesota fishing contest over a 58-year period. North American Journal of Fisheries Management 9:287-297.

Contributor (Name, Address, Phone, FAX):

Jerry Younk
MNDNR Fisheries Research
2114 Bemidji Ave.
Bemidji, MN 56601
Phone: (218) 755-2972

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Minnesota

Specie(s): Northern Pike

Native or Introduced / Range:

Northern pike are native to all major drainages in Minnesota and are present in about 4,000 lakes and 15,000 miles of fishable rivers. They comprise the largest percentage by weight of gamefish harvested in the state. Some management of spawning marshes and relocation of pike from winterkill lakes has occurred.

History of Angling Regulations:

The three fish possession limit, coupled with no length limit, has been continuous since 1948. Earlier (1930-47) possession limits ranged from 6 to 10. The "one over 30" limit was enacted in 1994.

Current Angling Regulations (1996)

Open Season(s):

Open Mid May to mid February

Darkhouse Spearing Season - Open December 1 to mid February (spearing is not allowed in designated muskellunge waters)

Length Limit(s):

None - general statewide regulation

Experimental Regulations:

Slot Length Limits: 20"-30" protected - 3 lakes
22"-30" protected - 2 lakes
24"-30" protected - 2 lakes
30"-40" protected - 1 lake

Maximum Length Limits: 20" - 2 lakes
22" - 1 lake
24" - 6 lakes

Daily Bag Limit(s):

3 (but only one may be over 30") - possession limit same - general statewide regulation

Experimental Catch-and-Release Only: 4 lakes

Rationale for Angling Regulations:

Closed season for the protection of fish staging for spawning. The one over 30" statewide possession limit was legislated politically with the intent of helping to maintain numbers of large pike. Slot length limits and maximum length limits are intended to alter the size structure of pike populations except for the one 30"-40" protected slot which is intended to protect existing size structure. Catch-and-Release regulations are intended either to alter the size structure of panfish populations or the size structure of pike populations.

Evaluations / Case Histories of Regulation Impacts:

Pierce, R.B. and C.M. Tomcko. 1997. Initial effects of slot length limits for northern pike in five north-central Minnesota lakes. Minnesota Department of Natural Resources, Section of Fisheries Investigational Report No. 454.

Other regulations are recent (within the last two years) and have ongoing evaluation programs that include fish population assessments and creel surveys.

Contributor (Name, Address, Phone, FAX):

Rod Pierce

Minnesota Department of Natural Resources

1201 E. Hwy 2

Grand Rapids, MN 55744

Phone: (218) 327-4452

FAX: (218) 327-4263

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Missouri

Specie(s): Muskellunge, Northern Pike, Grass Pickerel, Chain Pickerel

Native or Introduced / Range:

Chain and Grass Pickerel are endemic to the "bootheel" portion of Missouri. There are remnant native populations of Northern Pike on the fringe of their native range in extreme northeastern Missouri. Muskellunge fisheries are present in four waters; all are introduced and maintained solely by stocking. Hybrid muskellunge are not present.

History of Angling Regulations:

There has been no closed season on esocids for the past several decades. Daily bag limits have been one muskellunge or one northern pike, and six grass pickerel and chain pickerel in aggregate (bootheel populations). The statewide minimum length limit on northern pike and muskellunge was 30" through 1995, although Hazel Creek Lake opened with a 42" minimum in 1985. There have been no length limits on pickerel.

Current Angling Regulations (1996)

Open Season(s):

All esocids - Open all year

Length Limit(s):

Northern Pike, Grass and Chain Pickerel - None

Muskellunge - Pomme de Terre and Pony Express Lakes - 36" minimum (statewide base limit)
- Hazel Creek Lake and Lake Girardeau - 42" minimum

Daily Bag Limit(s):

Muskellunge - 1

Northern Pike - 1

Grass and Chain Pickerel - 6 in aggregate

Rationale for Angling Regulations:

Missouri maintains a year-round season for esocids to maximize fishing opportunity. Resource protection is accomplished through minimum length limits. Ten year goal (approved 1995) to provide catch rate of one 36"+ muskellunge per 20-40 hours of angling. The statewide minimum length limit was raised to 36" because all four muskellunge fisheries are maintained by stocking and catch-and-release alone cannot ensure that this goal will be met. To date, the 42" minimum length limit has been reserved for brood stock lakes to ensure an adequate egg supply though additional rationale included maximizing angler contact with fish and maximizing prey utilization by muskellunge.

Evaluations / Case Histories of Regulation Impacts:

"Show-Me Musky Project" - volunteer angler catch reporting program (initiated 1996).

Management efforts/direction for the Missouri Department of Conservation are summarized in, Neuswanger, D.J., A.S. Weithman, M.S. Kruse, R. Meade, and V.C. Suppes. 1994. "Muskellunge in Missouri - a Ten-Year Strategic Plan for Program Management." Missouri Department of Conservation. 46 pp.

Contributor (Name, Address, Phone, FAX):

Dave Neuswanger, Missouri Muskellunge Advisor
Missouri Department of Conservation
2500 S. Halliburton
Kirksville, MO 63501
Phone: (816) 785-2420

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Montana

Specie(s): Northern Pike, Hybrid (Tiger) Muskellunge

Native or Introduced / Range:

Northern Pike: native to a small portion of the state but illegally introduced by private individuals throughout the state. Populations are currently present in 130 waters statewide.

Hybrid Muskellunge: Introduced populations present in 5 waters in the central and northeast portion of the state. Evaluations for further introductions in progress.

History of Angling Regulations:

Northern Pike: liberalized regulations throughout most of the state to encourage harvest.

Hybrid Muskellunge: same regulation since first introductions in the mid-1980's

Current Angling Regulations (1996)

Open Season(s):

Open all year - both esocids

Length Limit(s):

Northern Pike: None

Hybrid Muskellunge: 30" minimum

Daily Bag Limit(s):

Northern Pike: 15 - western district,
10 - central and eastern districts
No restriction - several waters

Hybrid Muskellunge: 1

Rationale for Angling Regulations:

Northern Pike: A major management crisis is the illegal introduction of Northern Pike into coldwater systems throughout the state. They have been responsible for significant declines in salmonid populations (particularly bull trout) in a number of lakes and impoundments, liberal regulations are intended to encourage harvest. Additionally, several waters have no bag limit restrictions to maximize harvest in instances of illegal introduction and stunting. There is however interest by anglers in increased protection for some populations where they are not a threat to salmonids to improve quality.

Hybrid Muskellunge: regulation is intended to provide protection until fish have opportunity to reach relatively large size since these stocked populations are expensive to maintain.

Evaluations / Case Histories of Regulation Impacts:

Currently evaluating impacts of northern pike in several drainages. No formal evaluations of hybrid muskellunge. Population status/inventories and management options (including regulations) for esocids as well as other warmwater fisheries are discussed in the Department

publication, "Developing Montana's Statewide Warmwater Fisheries Management Plan". March 1996. Montana Fish, Wildlife and Parks.

Contributor (Name, Address, Phone, FAX):

Jim Satterfield, Fish Management Bureau Chief
Montana Fish, Wildlife and Parks
1420 East Sixth Avenue
P.O. Box 200701
Helena, MT 59620-0701
Phone: (406) 444-2445
FAX: (406) 444-4952

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Nebraska

Specie(s): Muskellunge

Native or Introduced / Range:

Muskellunge were first introduced in Lake Minatare in 1958 and have been stocked in several waters since then. To date, the only successful introductions have occurred in Merritt Reservoir, Watts Lake and to a limited degree in the Missouri River.

History of Angling Regulations:

Minimum length limits for muskellunge have remained constant since first introduced in the mid-1970's. Hybrid muskellunge were grouped with northern pike for regulatory purposes from 1986 through 1990. They are now grouped with muskellunge. Watts Lake has been closed to harvest of muskellunge since 1988.

Current Angling Regulations (1996)

Open Season(s):

Open all year

Length Limit(s):

30" minimum - statewide

Daily Bag Limit(s):

1 (2 possession)

Catch-and-Release only - Watts Lake

Rationale for Angling Regulations:

Bag limits are intended to spread out the harvest among anglers and prevent overharvest during vulnerable periods. Size limits intended to allow fish to attain a reasonable or trophy size or to increase predator biomass for control of prey species. The closure of harvest of muskellunge on Watts lake was designed to develop a broodstock. This was not attained but the regulation has remained in effect to provide quality angling for muskellunge.

Evaluations / Case Histories of Regulation Impacts:

None

Contributor (Name, Address, Phone, FAX):

Joel Klammer

Nebraska Game and Parks Commission - District II

P.O. Box 508

Bassett, NE 68714-0508

Phone: (402) 684-2921

FAX: (402) 684-2816

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Nebraska

Specie(s): Northern Pike

Native or Introduced / Range:

Northern Pike are native to Nebraska, originally common in the river systems. They now occur naturally throughout the sandhills region and are commonly stocked in the reservoirs of the state.

History of Angling Regulations:

Daily bag limits for northern pike have become increasingly restrictive over time: prior to 1930 - 15 to 25, mid-1930's - 10, 1937 - 5, 1960 - 6, 1978 - 3 east of Hwy 281, 6 west of Hwy 281, 1991 - 3 statewide. Length limits ranged from 12" to 16" between 1920 and 1952. No length limits were imposed between 1952 and 1963. Since 1964 there has been a 24" minimum length limit east of Hwy 281 while west of Hwy 281 there is no minimum length limit.

Angling regulations for northern pike on waters of the Valentine National Wildlife Refuge have included a number of length limits since 1988 including a 36" minimum, a 30" minimum, a 24" to 28" harvest slot and a 28" maximum. Angling regulations within the Refuge are set simply by posting the waters allowing great flexibility. In 1995, a 36" minimum length/one daily bag regulation was imposed on Branched Oak Reservoir.

Current Angling Regulations (1997)

Open Season(s):

Open all year

Length Limit(s):

24" minimum East of Hwy 281, no minimum elsewhere

36" minimum - Branched Oak Reservoir

Daily Bag Limit(s):

3 (6 in possession)

1 - Branched Oak Reservoir

Plans for 1998 include a 30" minimum length limit on Enders and Red Willow Reservoirs.

Rationale for Angling Regulations:

Bag limits are intended to spread out the harvest among anglers and prevent overharvest during vulnerable periods. Size limits intended to allow fish to attain a reasonable or trophy size or to increase predator biomass for control of prey species.

Evaluations / Case Histories of Regulation Impacts:

Most of the evaluations of length limits for northern pike were carried out by the US Fish and Wildlife Service on the Valentine Refuge lakes.

Contributor (Name, Address, Phone, FAX):

Joel Klammer

Nebraska Game and Parks Commission - District II

P.O. Box 508

Bassett, NE 68714-0508

Phone: (402) 684-2921

FAX: (402) 684-2816

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: New York

Specie(s): Muskellunge

Native or Introduced / Range:

Muskellunge are native to the Great Lakes, St. Lawrence River and Allegany River Drainages. Records from statewide fisheries surveys conducted in the 1930's provide an historic base of approximately 14,500 lake acres, 100 miles of inland river, the Niagara and St. Lawrence Rivers and occasional occurrences in Lake Erie, Lake Ontario and Lake Champlain.

Muskellunge in the Allegany waters exhibit characteristics of Esox masquinongy ohioensis strain while Great Lakes and St. Lawrence fish are considered E.m masquinongy strain.

History of Angling Regulations:

Size regulations have fluctuated with a 28" minimum length statewide through 1977 and a 30" minimum on Lake Chautauqua until 1980. A 36" minimum length was adopted for the St. Lawrence in 1978 based on rapid growth rates and considerable angler concern over a perceived decline in the fishery. A 32" minimum was adopted for Lake Chautauqua in 1980 as a result in an observed decline in the fishery.

Current Angling Regulations (1996)

Open Season(s):

Third Saturday in June through November 30

Length Limit(s):

30" minimum - statewide base regulation

44" minimum - Lake Erie, Lake Ontario, Niagara and St. Lawrence Rivers and their tributaries upstream to the first impassable barrier

40" minimum - Chautauqua Lake

Daily Bag Limit(s):

1 - statewide

Also - use of gaff hooks or clubs for landing fish prohibited

Rationale for Angling Regulations:

1. Perpetuate viable-fishable populations in all native waters
2. Chautauqua Lake - provide a primary sport fishery and provide broodstock for propagation
3. St. Lawrence and Niagara Rivers - maintain a naturally-spawned, totally self-sustained trophy fishery

Evaluations / Case Histories of Regulation Impacts:

Contributor (Name, Address, Phone, FAX):

Robert Brandt, Supervising Aquatic Biologist

New York State Department of Environmental Conservation
Division of Fish and Wildlife - Bureau of Fisheries
50 Wolf Road, Rm. 552
Albany, NY 12233-4753
Phone: (518) 457-9258
FAX: (518) 485-5827

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: New York

Specie(s): Hybrid (Tiger) Muskellunge

Native or Introduced / Range:

Most "tiger muskies" in New York State are primarily the result of hybridization of Allegany River strain (ohioensis) female muskellunge with male northern pike. First introduction to New York waters was in 1968. Over 50 lake and river sections statewide have been stocked with fingerlings. The South Otselic Fish Culture Station was extensively renovated and dedicated to production of tiger musky in 1984.

History of Angling Regulations:

Consistent throughout

Current Angling Regulations (1996)

Open Season(s):

First Saturday in May through March 15

Length Limit(s):

30" minimum - statewide

Daily Bag Limit(s):

1 - statewide

Rationale for Angling Regulations:

The goal of the tiger muskellunge program is "to provide opportunity for anglers to catch a warmwater gamefish over eight pounds, in waters located throughout New York State". The 30" minimum length limit affords protection until memorable size is reached while the single fish daily limit recognizes trophy status.

Evaluations / Case Histories of Regulation Impacts:

Experiences of fisheries staff indicate that initial growth of tiger musky is faster than either parental specie and angler vulnerability is intermediate between the two.

A program based on angler feedback has been used to evaluate program success due to the relative ineffectiveness of traditional fish sampling methods (netting and electrofishing).

Standardized records were collected by Department staff for 296 tiger muskellunge catches for 30 waters during 1986 through 1988. Information allowed gross determinations of program effectiveness in 23 waters but did not allow ranking of stocked waters or status of many stocked waters relative to program goal.

Contributor (Name, Address, Phone, FAX):

Robert Brandt, Supervising Aquatic Biologist

New York State Department of Environmental Conservation

Division of Fish and Wildlife - Bureau of Fisheries
50 Wolf Road, Rm 552
Albany, NY 12233-4753
Phone: (518) 457-9258
FAX: (518) 485-5827

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: New York

Specie(s): Northern Pike, Pickerel (Chain and Grass)

Native or Introduced / Range:

Northern Pike are native to most waters in northern New York and many large lakes and rivers of the central and western part of the state; they are rare in southeastern New York.

Chain Pickerel are widely distributed across most of the state but not common in many northern lakes nor are they present in the Allegany and Genesee River systems.

Grass Pickerel in many waters statewide but distribution is somewhat spotty and the probability of encounters by anglers is slight.

History of Angling Regulations:

Northern Pike: 22" minimum length limit adopted in mid-1970's statewide from 18". Length limit subsequently returned to 18" except in waters with rapid growth rates.

Current Angling Regulations (1996)

Open Season(s):

First Saturday in May through March 15

Length Limit(s):

Northern Pike: 18" minimum - most waters

22" minimum - Lake Erie, Lake Ontario, Niagara River, St. Lawrence River and their tributaries up to impassable barriers and the Finger Lakes

Pickerel : 15" minimum except in numerous waters of northern New York which have no length limit where pickerel are considered an "undesirable" competitor species

Daily Bag Limit(s):

5 of each

Rationale for Angling Regulations:

Length limits allow sexual maturity and spawning of females prior to attainment of legal size.

Season restrictions are protective of chain pickerel during spawning period.

Grass pickerel are of little importance to anglers and rarely reach legal size but are similar in appearance to chain pickerel which may result in misidentification. Combining the two species under a single regulation results in little loss of angler use or harvest opportunity.

Evaluations / Case Histories of Regulation Impacts:

Evaluation of the 22" statewide minimum length limit for northern pike adopted in the mid-1970's indicated that it afforded too much protection except for populations with rapid growth rates. Managers concerns focused on both the availability of harvestable northern pike to anglers and disruption of predator-prey relationships in more "typical" waters. The statewide minimum length limit was subsequently returned to 18" except in waters with rapid growth rates.

Contributor (Name, Address, Phone, FAX):

Robert Brandt, Supervising Aquatic Biologist
New York State Department of Environmental Conservation
Division of Fish and Wildlife - Bureau of Fisheries
50 Wolf Road, Rm.552
Albany, NY 12233-4753
Phone: (518) 457-9258
FAX: (518) 485-5827

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: North Dakota

Specie(s): Northern Pike, Muskellunge

Native or Introduced / Range:

Northern pike are native to the state while muskellunge are introduced. There is some conjecture that original muskellunge range may have extended into North Dakota.

History of Angling Regulations:

Angling regulations for muskellunge have remained consistent to present. Daily bag and possession limits for northern pike have been three since 1954 but length limits have varied. A statewide minimum length limit of 14" in 1954 was increased to 18" from 1956 through 1961. From 1964 through 1985, individual water minimum length limits of 20", then 24" and finally 22" were in force on from 2 to 13 waters. There were no minimum length restrictions on any waters from 1986 through 1993. Since then several waters (5 in 1996-98) have been managed under a 24" minimum length limit.

Current Angling Regulations (1996)

Open Season(s):

Open all year

Length Limit(s):

Northern Pike: none - statewide base regulation, 24" minimum - 5 waters

Muskellunge: 30" minimum

Daily Bag Limit(s):

Northern Pike: 3 - statewide (possession limit twice the daily bag limit)

Muskellunge: 1 - statewide (possession same)

Rationale for Angling Regulations:

The 24" minimum length limits for northern pike were implemented for biological control of undesirable fish, i.e. carp and white sucker.

Evaluations / Case Histories of Regulation Impacts:

Department is in process of evaluating the effects of increased length limits on northern pike. Evaluation phase to continue through 1998 (5 years). No results are yet available.

Contributor (Name, Address, Phone, FAX):

Terry Steinwand, Chief, Fisheries Division

North Dakota Game and Fish Department

100 North Bismark Expressway

Bismark, ND 58501-8095

Phone: (701) 328-6313

FAX: (701) 328-6352

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Ohio

Specie(s): Muskellunge

Native or Introduced / Range:

Muskellunge are native to Ohio and were abundant historically in both the Lake Erie and Ohio River drainage basins. Today, native muskellunge are rare in the Lake Erie drainage; most populations are found in southern Ohio River drainage streams. Stocked populations (Ohio River strain) are being maintained in eight lakes in the state. Naturally reproducing populations occur in Berlin Lake and a few Ohio River tributaries. Angler catch records from 1964-1981 indicated that at least one muskellunge had been caught from 39 lakes and 27 streams.

History of Angling Regulations:

Pymatuning Reservoir (border with Pennsylvania) had a daily bag limit of 2 set in 1963 and a minimum length limit of 30" set in 1969. A statewide daily bag limit of 2 was set in 1973. A 40" minimum length limit was set for Berlin Lake in 1991 and dropped in 1997. In 1994, a 30" minimum length limit was established for the Ohio River and its embayments and tributaries upstream to the first riffle or dam (this regulation unified with those of West Virginia and Kentucky on this border water).

Current Angling Regulations (1997)

Open Season(s):

Open all year

Length Limit(s):

30" minimum - Ohio River and embayments and tributaries, Pymatuning Lake

Daily Bag Limit(s):

2 - statewide

Rationale for Angling Regulations:

The 40" minimum at Berlin Lake was set to try to produce a self-sustaining stock of at least 0.2 muskellunge per acre at age 4 or older by 1996.

The overall goal of the muskellunge program is to provide 150,000 angler hours annually with a catch of 1700 (30"+) muskellunge and 317 (42"+).

Evaluations / Case Histories of Regulation Impacts:

The 40" minimum length limit did not produce a self-sustaining population of 0.2 per acre in Berlin Lake by 1996 and has been dropped for 1997. Angler harvest was not the limiting factor however. Emigration losses and poor year classes associated with low water levels during spawning in April and May were more significant factors. Continuation of the length limit was not justified on a biological basis.

Contributor (Name, Address, Phone, FAX):

Richard Day

Ohio Department of Natural Resources

952 Lima Ave.

Findley, OH 45840

Phone: (419) 424-5000

FAX: (419) 422-4875

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Oklahoma

Specie(s): Northern Pike, Chain Pickerel, Grass Pickerel

Native or Introduced / Range:

Chain and Grass Pickerel are native to waters of southeastern Oklahoma. Neither are abundant, chain pickerel particularly being extremely rare, nor sought as a game fish.

Northern Pike are not native to the state but were introduced into several lakes in northern Oklahoma during the 1960's and early 1970's. Angler interest was low and stocking discontinued. Northern pike are no longer found in surveys and rarely reported by anglers though a few may still be present.

History of Angling Regulations:

There are no angling regulations for pickerel. The only restriction on northern pike harvest has been that it may only be taken by hook and line attached to a pole, rod, jugline, limblime, throwline or trotline.

Current Angling Regulations (1996)

Open Season(s):

Open all year

Length Limit(s):

None

Daily Bag Limit(s):

Unlimited

Rationale for Angling Regulations:

N/A

Evaluations / Case Histories of Regulation Impacts:

None

Contributor (Name, Address, Phone, FAX):

Charles R. Wallace, Administrative Assisstant
Oklahoma Department of Wildlife Conservation
1801 N. Lincoln
P.O. Box 53465
Oklahoma City, OK 73105

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Pennsylvania

Specie(s): Muskellunge (True and Hybrid), Northern Pike, Chain Pickerel

Native or Introduced / Range:

Muskellunge are native to Pennsylvania though most populations today are maintained through stocking. Muskellunge, either purebred or hybrid (tiger) are found in nearly every county in the state. Often a mix of both purebred and tiger muskellunge are stocked to provide the easier-to-catch hybrid as well as the more difficult but longer lived purebred.

Several waters in the state have naturally reproducing populations of chain pickerel or northern pike. Some stocking of both species occurs to establish populations in new or reclaimed lakes or to maintain populations with inadequate natural reproduction.

History of Angling Regulations:

1946 - open season July 1 through November 30. Statewide minimum length/creel limits: muskellunge 24"/2 bag, northern pike-12"/6 bag, pickerel-12"/6 bag

1950 - northern pike limits changed to 16" minimum/4 bag. Pymatuning Reservoir muskellunge had a 30" minimum/2 bag and northern pike in Lake Erie were managed with a 12" minimum/8 bag.

1957 - esocid angling season open year round (including border waters). Minimum length limits dropped in Pymatuning Reservoir. Minimum length limit for northern pike and pickerel reduced to 12"

1958- statewide minimum length limit of 30" for muskellunge and 20" for northern pike

1960 - angling season closed mid-March through mid-June inland but still open year-round on Pymatuning Reservoir and Lake Erie.

1964 - angling season opening date changed to early May.

1968 - statewide minimum length limit for northern pike raised to 24"

Current Angling Regulations (1997)

Open Season(s):

Statewid - Early May to mid-March

Border Waters (Pymatuning Reservoir, Delaware River, Conowingo Reservoir) - Open all year

Length Limit(s):

Statewide - Muskellunge (including hybrid) - 30" Minimum

Northern Pike - 24" minimum

Pickerel - 15" minimum

Special regulation lakes - Muskellunge - 36" minimum

Northern Pike - 28" minimum

Pickerel - 20" minimum

Border water exceptions - Pymatuning Reservoir - Northern Pike/Pickerel - No minimum

Delaware River - Northern Pike - No minimum, Chain Pickerel - 12"

Conowingo Reservoir - Chain Pickerel - 14" minimum

Daily Bag Limit(s):

Statewide - Muskellunge - 2, Northern Pike - 2, Pickerel - 6 (except December through mid-March when the bag limit is 3)

Special regulation lakes - Muskellunge - 1, Northern Pike - 1, Pickerel - 2

Border water exceptions - Pymatuning Reservoir - no bag limits for Northern Pike and Pickerel

Delaware River - Pickerel - 5 bag, Northern Pike - no bag limit

Conowingo Reservoir - Muskellunge - 1 bag, Pickerel - 5 bag

In process of initiating (for 1998) a 40" minimum/ 1 daily bag regulation on Lake Erie/Presque Isle Bay waters

Rationale for Angling Regulations:

Rationale for early regulations, especially changes in length limits not known but more recent regulations focus on protection of esocids until they reach a "quality" size and to protect stocked populations to maintain fishable abundance.

Evaluations / Case Histories of Regulation Impacts:

Package of increased minimum length limits and reduced creel limits for gamefish in a select group of reservoirs initiated in 1987. Included was a 36" minimum for muskellunge (including hybrids), 28" minimum for northern pike and 20" for chain pickerel. Angler user/harvest/opinion studies the year prior to implementation and four years after in addition to extensive/intensive biological sampling were used to evaluate response to special regulations. Unable to reach conclusions on impacts to esocids due to either insufficient data or responses masked by changes in other populations, especially black bass. Still have the regulations in place on six waters.

Contributor (Name, Address, Phone, FAX):

Richard A. Snyder, Chief - Fisheries Management Division

Pennsylvania Fish and Boat Commission

Division of Fisheries Management

450 Robinson Lane

Bellefonte, PA 16823-9620

Phone: (814) 359-5110

FAX: (814) 359-5153

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: South Dakota

Specie(s): Muskellunge, Hybrid Muskellunge, Northern Pike

Native or Introduced / Range:

Muskellunge are an introduced specie while northern pike are native to South Dakota.

History of Angling Regulations:

Daily bag limit for muskellunge has always been one fish and the minimum length limit for tiger muskellunge has always been 30". In our one, pure muskellunge lake (Lake Amsden), the minimum length for muskellunge has increased from 32-36-40 inches since muskellunge were introduced in the early 1980's.

No effective length limits have ever been in effect for northern pike; there once was a very small (6 inch) minimum length limit on gamefish. Daily bag limits have varied greatly over the years depending on fish population status and sociological considerations.

Current Angling Regulations (1996)

Open Season(s):

Open all year (except on MN-SD border waters - closed from March 1 until last Sat in April)

Length Limit(s):

Pure and Tiger Muskellunge - 30" minimum statewide

Northern Pike - No minimum statewide except Lacreek National Wildlife Refuge which has a 24 - 28" reverse slot and a one fish over 36" daily bag limit

Daily Bag Limit(s):

Muskellunge and Tiger Muskellunge - 1 statewide

Northern Pike - 6 statewide base limit, 3 on Missouri River reservoirs, Lake Pocasse and Lacreek NWR and SD-MN border waters, 18 on "Liberalized Lakes" (potential for winterkill)

Rationale for Angling Regulations:

Muskellunge/tiger muskellunge regulations minimize harvest and provide anglers with a trophy opportunity. Northern pike regulations ensure distribution of harvest and promote "quality" idea.

Evaluations / Case Histories of Regulation Impacts:

None specific; only fish population and creel survey data available for evaluation

Contributor (Name, Address, Phone, FAX):

John Lott

South Dakota Department of Game, Fish and Parks

523 E. Capitol

Pierre, SD 57501

Phone: (605) 773-4158

FAX: (605) 773-3399

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Tennessee

Specie(s): Muskellunge, Northern Pike, Pickerel (Chain and Grass)

Native or Introduced / Range:

Muskellunge are native to Tennessee but naturally reproducing populations are confined primarily to plateau streams. There is little stocking of these stream populations though several reservoirs in the state are stocked on a regular basis. Unfortunately, the status of the native Tennessee stream muskellunge appears grim, with the strong possibility that populations may never recover. The state record for muskellunge is 42 pounds/eight ounces.

Both chain and grass pickerel are also native to Tennessee.

Northern pike are an introduced specie. The Tennessee Valley Authority began a stocking program of northern pike into Melton Hill Reservoir in the late 1970's. This program was discontinued in 1990 due to poor (if any) natural reproduction in the population. Currently, the northern pike population and fishery is very low. A new state record northern pike weighing 24 pounds/7 ounces was caught in 1995.

History of Angling Regulations:

Current regulations for pickerel have been in place for 30+ years.

Muskellunge and Northern Pike regulations have been more variable.

1950-53	Musky	Creel limit 5, no length limit
1954-65	Musky	Creel limit 5, 25" minimum length
1966-68	Musky	Creel limit 3, 30" minimum length (impoundments) 25" minimum length (streams)
1969-73	Musky	Creel limit 1, 30" minimum length (impoundments) 25" minimum length (streams)
1974-75	Musky/Northern	Creel limit 1, 30" minimum length (statewide) 25" minimum length (certain streams)
1976-	Musky/Northern	Creel limit 1, 30" minimum length (statewide)

Current Angling Regulations (1996)

Open Season(s):

Open year round for all esocids

Length Limit(s):

Muskellunge and Northern Pike- 30" minimum statewide

Chain and Grass Pickerel - No length limit

Daily Bag Limit(s):

Muskellunge and Northern Pike - 1 each

Chain and Grass Pickerel - no bag limit restrictions

Rationale for Angling Regulations:

Origin of initial regulations is unknown. However, in 1954 the length limit regulation was implemented due to a declining muskellunge population as a result of overharvest and stream degradation due to acid mine drainage, industrial pollution, and siltation. In 1974, northern pike were included with muskellunge in the angling regulations probably because northern pike were being caught by anglers in the South Holston Reservoir which had been inadvertently released from a hatchery into streams in the Virginia portion of the reservoir by the Virginia Game and Fish Commission. In 1976, the 30" length limit was include for both species statewide due to increased fishing pressure for both species in certain reservoirs, to declining muskellunge populations in some of the streams of the Cumberland Plateau, and to the high cost of rearing muskellunge fingerling for stocking.

Evaluations / Case Histories of Regulation Impacts:

Angling pressure for esocids is light. There are a few dedicated muskellunge anglers, primarily in the Knoxville area.

Contributor (Name, Address, Phone, FAX):

Wayne Pollack, Bobby Wilson
Tennessee Wildlife Resources Agency
P.O. Box 40747
Nashville, TN 37204

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Vermont

Specie(s): Muskellunge, Northern Pike, Chain Pickerel

Native or Introduced / Range:

The only native muskellunge in Vermont (St. Lawrence strain) was found in the lower Missisquoi River. A fish kill about 15 years ago eliminated this population though there are plans to try to restore it. Angling for muskellunge is presently closed in this river section. Muskellunge (Ohio strain) have also been introduced to two other rivers in the state with some success.

Northern pike are native to Vermont and are found in many lakes. Some populations are the result of stocking adults by the Department years ago. There are also a few populations that have been established through illegal stocking.

Chain pickerel are also a native esocid.

History of Angling Regulations:

Regulations on esocids in Vermont are very liberal and until recently (last 10 years) they were considered an incidental harvest. More anglers are now concentrating their efforts on northern pike and there is considerable pressure to develop muskellunge fisheries. Vermont also has a shooting and spearing season (with a rifle or bow) for esocids on Lake Champlain which runs from March 25 to May 25. The Department is on record for not supporting this activity but it is controlled by the Legislature.

Current Angling Regulations (1996)

Open Season(s):

Open all year - all esocids

Length Limit(s):

Muskellunge - 30" minimum, Northern Pike - 20" minimum, Chain Pickerel - No minimum

Daily Bag Limit(s):

Muskellunge - 1, Northern Pike - 5, Chain Pickerel - No bag limit restrictions

Rationale for Angling Regulations:

There is very little biological reason behind the current angling regulations for esocids. The state expects to begin developing an esocid management plan in the near future, particularly in reference to muskellunge.

Evaluations / Case Histories of Regulation Impacts:

None

Contributor (Name, Address, Phone, FAX):

Jon K. Anderson, District Fisheries Biologist

Vermont Department of Fish and Wildlife

111 West St.

Essex Jct., VT 05452

Phone: (802) 878-1564

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Wisconsin

Specie(s): Muskellunge, Hybrid Muskellunge

Native or Introduced / Range:

Muskellunge are native to Wisconsin and found in over 700 waters, most of which are located in the northern half of the state. The majority of these waters are located within the Chippewa, Flambeau or Wisconsin Rivers drainages. While native to the state, a number of populations are introduced. Many populations are maintained at least partially by stocking; over 80% of muskellunge waters receive some stocking of large size fall fingerlings.

Some natural hybridization of muskellunge and northern pike occurs at low levels in a few waters. Hybrid muskellunge have been stocked in up to 20 waters in southern Wisconsin outside the native muskellunge range. Current stocking is limited to private stocking of a few waters.

History of Angling Regulations:

Prior to 1983, muskellunge regulations changed little since 1935. The minimum length limit was 30" and the daily bag limit was one fish. Season opening dates were gradually set earlier from May 25 in 1939 to the first Saturday in May in 1973. The statewide minimum length limit was raised to 32 " in 1983 based in part on evaluations of special 32, 34, and 36" minimum length limits on a limited number of waters. The opening date in the northern half of the state was pushed back to the Saturday nearest Memorial Day (May) in 1984. Increased minimum length limits (40"- 55 waters, 45"- 2 waters) were instituted in 1992. The statewide minimum length limit was raised to 34" in 1995. Additional waters have been added to the list of higher minimum length limits and several lakes now have a 50" minimum length limit.

Hybrid muskellunge are included with muskellunge for regulatory purposes.

Current Angling Regulations (1997)

Open Season(s):

North Zone - Saturday nearest Memorial Day (late May) - November 30

South Zone - first Saturday in May - November 30

Length Limit(s):

34" minimum - general regulation statewide

40" minimum - 74 waters

45" minimum - 2 waters

50" minimum - 3 waters

Daily Bag Limit(s):

1 - statewide

Rationale for Angling Regulations:

The statewide minimum length limit of 34" protects fish in most populations until past sexual maturity and provides some additional "quality" protection. Higher minimum length limits are

designed to provide increased abundance of large, trophy-size muskellunge and possibly to increase natural reproduction through the presence of more large spawning females.

Evaluations / Case Histories of Regulation Impacts:

Hanson, David A. 1986. Population characteristics and angler use of muskellunge in eight northern Wisconsin lakes. In: Managing Muskies. American Fisheries Society Special Publ. 15:238-248. 1986. Gordon E. Hall, Ed.

An evaluation of the 40" minimum length limit is currently in progress. Begun in 1992, it is scheduled to continue until 2002 examining changes in population parameters including adult abundance (mark and recapture population estimates), size structure, growth rates and natural reproduction in 7 treatment (40") and 8 control (34") lakes at five year intervals.

Contributor (Name, Address, Phone, FAX):

Steve AveLallemant, Fisheries Biologist
Wisconsin Department of Natural Resources
8770 Hwy J
Woodruff, WI 54568
Phone: (715) 358-9235
FAX: (715) 358-2352

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Wisconsin

Specie(s): Northern Pike

Native or Introduced / Range:

Northern pike are native and widely distributed throughout Wisconsin. Most populations are sustained by natural reproduction. Some stocking occurs, primarily in the southern half of the state where reproductive failures due to loss of spawning habitat through shoreline development and wetland loss have occurred.

History of Angling Regulations:

Historically, angling regulations for northern pike have been liberal, particularly in the northern part of the state. Statewide angling regulations were evaluated and a number of significant changes proposed and implemented through a broad-based committee process involving many interest groups during 1993-94. Current regulations reflect these changes.

Current Angling Regulations (1997)

Open Season(s):

First Saturday in May through March 1 - statewide

Length Limit(s):

none - general regulation in Northern Zone

26" minimum - general regulation in Southern Zone and a few waters in Northern Zone

32" minimum - 15 waters statewide

40" minimum - 3 waters in southern part of state

Daily Bag Limit(s):

5 (10 in possession) - general regulation in Northern Zone

2 (4 in possession) - general regulation in Southern Zone (and Northern Zone waters with 26" minimum length limits)

1 (2 in possession) - bag limit associated with 32" and 40" minimum length limit lakes

Rationale for Angling Regulations:

Angling regulations in the Southern Zone are intended to increase adult abundance and natural reproduction which are, in general, poor in this part of the state. Liberal angling regulations in most northern waters encourage harvest in waters within the native range of muskellunge. High minimum length limits on selected waters are intended to improve trophy northern pike angling opportunities.

Evaluations / Case Histories of Regulation Impacts:

An 18" minimum length limit on Bucks Lake and a 22" minimum length limit on Escanaba Lake (both small lakes in northern Wisconsin) failed to increase abundance of larger northern pike.

Snow, H. E., T.D. Beard. 1972. A ten year study of native northern pike in Buck's Lake, Wisconsin, including evaluation of an 18.0-inch size limit. Tech. Bull. No. 56, Wisconsin Department of Natural Resources, Madison, WI.

Kempinger, J.J., R.F. Carline. 1978. Changes in population density, growth, and harvest of northern pike in Escanaba Lake after implementation of a 22-inch size limit. Tech. Bull. 104, Wisconsin Department of Natural Resources, Madison, WI.

Higher minimum length limits (26, 32 and 40") are new (1994) and not yet evaluated.

Contributor (Name, Address, Phone, FAX):

Steve AveLallemant, Fisheries Biologist
Wisconsin Department of Natural Resources
8770 Hwy J
Woodruff, WI 54568
Phone: (715) 358-9235
FAX: (715) 358-2352

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Alberta

Specie(s): Northern Pike

Native or Introduced / Range:

Northern Pike are native to Alberta and occur in many waters throughout most of the province. It is uncommon in the Rocky Mountains and adjacent foothills however.

History of Angling Regulations:

Alberta has a history of liberal regulations for northern pike over the last 25 years. The daily/possession limit has been 10 since 1970 and was previously 15 back to at least 1954. Some commercial harvest occurs, primarily for export. Trophy regulations have recently been put into effect for northern pike on at least 7 waters. These regulations consist of shortened open seasons and reduced daily bag limits as well as a ban on the use of live bait.

Current Angling Regulations (1996)

Open Season(s):

Open all year - general regulation provincewide

Trophy Waters Sportfishing: June 1 to October 31 - 4 waters, May 20 to March 31 - 1 water,
May 6 to March 31 - 1 water, June 1 to March 31 - 1 water

Length Limit(s):

No length limits - general regulation provincewide

90 cm minimum length - Seibert Lake (Trophy Water)

Daily Bag Limit(s):

10 - general regulation provincewide

Trophy Waters Sportfishing: 5 - 4 waters, 2 - 3 waters

Possession limit same as daily bag limit for all waters

Rationale for Angling Regulations:

Regulations provide for liberal harvest except for Trophy lakes where emphasis is put on quality.

Evaluations / Case Histories of Regulation Impacts:

Aspects of the impacts of trophy pike regulations are discussed in the following:

Makowecki, r. 1973. The Trophy Pike of Seibert Lake. M. Sc. Thesis, Dept. Of Zoology,
University of Alberta, Edmonton, Alberta.

Recent information collected on lakes in northeastern Alberta indicate some serious problems respecting the status of several study lake populations of northern pike. Consequently, Alberta is advancing its northern pike species management planning exercise and giving this exercise high priority over the next year to address this issue.

Contributor (Name, Address, Phone, FAX):
Duane S. Radford, Head, Fisheries Management
Fisheries Management Division
Alberta Natural Resources Service
2nd Floor, Bramalea Building
9920 - 108th Street
Edmonton, Alberta T5K 2G6
Phone: (403) 427-7758
FAX: (403) 422-9559

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Manitoba

Specie(s): Northern Pike

Native or Introduced / Range:

Northern Pike are native to Manitoba and present in many waters throughout the province.

History of Angling Regulations:

Prior to 1974, the general creel limit for pike was eight fish per day with sixteen possession limit. The possession limit was reduced to the same as the daily creel limit in 1974 and remained so until the early 1980's.

Lower limits for pike were introduced in the early 1980's through the introduction of the High Quality Management program and the Conservation licence. Maximum size limits, slot limits and no-kill limits were also introduced at this time. Expansion of these programs has occurred through the 1990's. In 1989, the general creel limit was reduced from eight to six. Over the past several years a number of tourist operators have opted for no harvest of pike over the maximum length limit of 70 cm (30").

Current Angling Regulations (1996)

Open Season(s):

Southern Division - May 10 through March 31

NW and NC Divisions - May 17 through April 30

NE Division - open all year

Length Limit(s):

No minimum length limit provincewide

Special Length Regulations:

1) all northern pike greater than 75 cm (30 inches) must be released; NW - 13 waters, NC - 3 waters, NE - 86 waters

2) all northern pike between 75 cm (30 inches) and 105 cm (41 inches) must be released; NW - 1 water

Daily Bag Limit(s):

Regular license - 6 but only one may exceed 75cm (30 inches)

Conservation license - 4 but only one may exceed 75 cm (30 inches)

High Quality Management Waters - 4 but only one may exceed 75 cm (30 inches)

Number of Waters: S - 4, NW - 25, NC - 29, NE - 86

Rationale for Angling Regulations:

Most regulations directed at maintaining higher quality angling opportunities for tourism. In some instances, slot limits and no kill limits have been used to re-establish numbers of trophy size fish in populations.

Evaluations / Case Histories of Regulation Impacts:

Budget and staff constraints limit evaluation. Lodge operators however indicate that these types of regulations have been effective in producing more trophy pike. Master Angler Award records of trophy pike caught annually also support their claims. Compliance with trophy regulations appears to be high for both resident and non-resident anglers.

Contributor (Name, Address, Phone, FAX):

Carl L. Wall
Manitoba Natural Resources
Fisheries Branch
200 Saultreaux Cres.
Winnipeg, MB R3J 3W3
Phone: (204) 945-7811
FAX: (204) 948-2301

ESOCID ANGLING REGULATIONS SYNOPSIS
Esocid Technical Committee
North Central Division / American Fisheries Society

State / Province: Northwest Territories

Specie(s): Northern Pike

Native or Introduced / Range:

Northern pike are native and occur throughout most of mainland Northwest Territories being abundant in most areas except in the immediate vicinity of Yellowknife.

History of Angling Regulations:

Esocids are generally not highly regarded by residents, however, there is a significant non-resident fishery primarily through outfitted lodges and localized commercial and subsistence catches.

Current Angling Regulations (1996)

Open Season(s):

Open all year

Length Limit(s):

none

Daily Bag Limit(s):

2 (3 in possession only one of which may be longer than 90 cm (35"))- Mackenzie River and tributaries between 116 and 118 west long.

5 (10 in possession) - waters in Gwich'in, Inuvialuit, Nunavut and Sahtu Settlement Areas except for Great Bear Lake

3 (5 in possession) - all other NWT waters including Great Bear Lake

Rationale for Angling Regulations:

None provided. Angling regulations are Federal and administered by the Department of Fisheries and Oceans: Grant Pryznk, Box 2310, Yellowknife, NT X1A 2P7, phone (403) 920-6640

Evaluations / Case Histories of Regulation Impacts:

None

Contributor (Name, Address, Phone, FAX):

Don Vincent

Fisheries and Land Claims

Department of Renewable Resources

Government of the Northwest Territories

600, 5102 - 50th Ave.

Yellowknife, NT X1A 2Z2

Phone: (403) 873-7008

FAX: (403) 873-0114

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Ontario

Specie(s): Muskellunge

Native or Introduced / Range:

Muskellunge are native to Ontario. An atlas of muskellunge lakes compiled in 1987 lists 302 lakes where this species is known to be present. About half of these are located in the northwestern region of the province.

History of Angling Regulations:

Angling regulations are implemented after a range of management options are presented to the public and client groups. In 1987, a provincial Muskellunge Management Committee reviewed existing regulations and recommended a number of changes. Creel limits were reduced from two fish to one. Minimum length limits were increased from the previous 28 or 30" minimums. Three length limits were established: 102 cm (40") on the Great Lakes, St. Lawrence River, and selected lakes in Northwest Region; 94 cm (37") on the Niagara River; and 86 cm (34") in all other waters. Even higher minimum length limits have been implemented on selected waters since 1987. There have also been additional boundary waters restrictions, new catch-and-release regulations (e.g., Lac Seul) and a new optional Resident Conservation Fishing Licence which has a catch and possession limit of zero.

Current Angling Regulations (1996)

Open Season(s):

With few exceptions, June 1 or June 15 to November 30 or December 15

Length Limit(s):

86 cm (34") minimum - base regulation provincewide

94 cm (37") minimum - Niagara River

102 cm (40") minimum - Great Lakes, French River and several other lakes in Southern and Northwestern Ontario

104 cm (41") fork length minimum - Ottawa River

106.7 cm (42") minimum - Lake St. Clair

112 cm (44") minimum - St. Lawrence River, Lake St. Francis

122 cm (48") minimum - Lake of the Woods and several other waters in the Northwest Region

132 cm (52") minimum - Lake Wabigoon and several other waters in Northwest Region

Daily Bag Limit(s):

1 (1 in possession) - most waters

0 (0 in possession) - holders of Resident Conservation Fishing Licence; also Lac Seul, and several other waters in Northwestern Ontario

Rationale for Angling Regulations:

Minimum length limits to at least protect female muskellunge through two spawning seasons. In

trophy waters, size limits are designed to ensure low harvest rates and trophy quality fishing. On some border waters, the size limits are set to harmonize with neighboring jurisdictions.

Evaluations / Case Histories of Regulation Impacts:

Current information relative to regulations are discussed in the following:

Kerr, S.J. and C.H. Olver [eds.]. 1996. Managing Muskies in the 90's. Workshop Proceedings, Ontario Ministry of Natural Resources, Southern Region Science and Technology Transfer Unit Workshop Proceedings WP-007. 169pp. Mr. Kerr may also be reached at the Ontario Ministry at (613) 258-8212.

Contributor (Name, Address, Phone, FAX):

Cheryl Lewis
Warmwater Fisheries Ecologist
Fisheries Section, Fish and Wildlife Branch
Ontario Ministry of Natural Resources
300 Water Street
Peterborough, Ontario K9J 1N2
Phone: (705) 755-1919

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Ontario

Specie(s): Northern Pike

Native or Introduced / Range:

Northern Pike are native to Ontario. An atlas of northern pike lakes compiled in 1990 lists 6411 lakes where this species is known to be present. About 70% of these are in the northern regions of the province.

History of Angling Regulations:

Angling regulations are implemented after a range of options has been presented to the public and client groups.

Current Angling Regulations (1996)

Open Season(s):

Northern Ontario and Southwestern Ontario have all-year open seasons. With few exceptions, other waters have openseasons from the first, second, or third Saturday in May until the 15th or 31st of March. Some lakes are in fishing divisions with a winter closure from November 15th or 30th until the spring opening.

Length Limit(s):

Most lakes outside of northwestern Ontario have no length limits for northern pike. In most northwestern Ontario lakes, only one fish of the daily bag limit may be greater than 70 cm (27.5") (most waters in the northwest) or 80 cm (31.5") (fewer waters in the northwest). On the French River, a protected slot of 53-86 cm (21-34") is in place, with only one fish of the daily bag allowed over 86 cm (34").

Daily Bag Limit(s):

6 (6 in possession) - most waters

2 (2 in possession) - holders of Resident Conservation Fishing Licence

4 (4 in possession) and 2 (2 in possession) - in place for a few waters

Rationale for Angling Regulations:

Pike are not heavily exploited in the southern part of the province. In Northwestern Ontario and certain other locations, pike are being managed as a trophy species and regulations are designed to meet this objective.

Evaluations / Case Histories of Regulation Impacts:

None provided

Contributor (Name, Address, Phone, FAX):

Cheryl Lewis

Warmwater Fisheries Ecologist

Fisheries Section, Fish and Wildlife Branch
Ontario Ministry of Natural Resources
P.O Box 7000 300 Water Street
Peterborough, Ontario K9J 1N2
Phone: (705) 755-1919

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Saskatchewan

Specie(s): Northern Pike

Native or Introduced / Range:

Northern pike are a native species throughout the province.

History of Angling Regulations:

Daily bag limits for northern pike have changed considerably over time and are the primary tool for limiting harvest. Daily bag limits have become more restrictive as follows: 15 pike or walleye (1927-35), 12 pike or walleye (1936-46), 12 pike (1947-50), 10 pike to max. Weight of 40 pounds, plus one pike (1951-52), 8 pike to max of 40 pounds, plus one pike (1953-73), 8 pike or 25 pounds - North Zone / 8 pike - South Zone (1974-84), 6 pike but only one over 5 kg - North and Central Zones / 6 pike - South Zone (1985-90), 6 pike but only one over 85 cm - North and Central Zones / 6 pike - South Zone (1991-92), and finally 6 pike but only one over 75 cm (30") (since 1993).

Possession limits have varied less having been the same as the daily limit from 1927-35, twice the daily limit from 1936-95, and back to the same as the daily limit in 1996.

Current Angling Regulations (1996)

Open Season(s):

Early May through March 31

Length Limit(s):

No minimum but only one may exceed 75 cm (30") - nearly all waters
75-105 cm (30-41") protected slot - one water

Daily Bag Limit(s):

6, only one of which may be larger than 75 cm (30")

Rationale for Angling Regulations:

Limits are designed to allow anglers to keep one large (trophy) pike, but also limits the harvest of large spawning fish. In some areas, where angling pressure is more intense, special Catch and Release limits are used, as follows:

CR1 - half limits (3 pike, only one exceeding 75 cm)

CR2 - half limits (3 pike, none may exceed 75 cm)

CR3 - 1 fish (which may be a pike, but may not exceed 75 cm)

Special limits are often developed in consultation with local advisory committees comprised of local interest groups, which helps to ensure community support.

Evaluations / Case Histories of Regulation Impacts:

Little information to date on the success of the upper size limits on pike populations. Lodge operators in special Catch and Release waters for several years report improvement in number

and size of pike. To some extent, the impacts on pike populations in the southern portion of the province is more related to habitat damage and/or loss as well as dry periods (with resulting poor spring flooding and spawning conditions) throughout the 1980's.

Contributor (Name, Address, Phone, FAX):

Bruce Howard, Sport Fish Specialist
Fisheries Branch
Saskatchewan Environment and Resource Management
3211 Albert St.
Regina, Saskatchewan S4S 5W6
Phone: (306) 787-2877
FAX: (306) 787-0737

ESOCID ANGLING REGULATIONS SYNOPSIS

Esocid Technical Committee

North Central Division / American Fisheries Society

State / Province: Yukon

Specie(s): Northern Pike

Native or Introduced / Range:

Northern pike are native to the Yukon and have never been introduced into any water body. They are found in nearly all lakes and rivers in the Yukon. Populations are stable but subject to overharvest of larger individuals in some waters.

History of Angling Regulations:

Little change in general regulations since at least 1977. High Quality Management Regulations introduced in 1991 to ensure that heavily fished lakes maintain a supply of large, trophy sized fish.

Current Angling Regulations (1997)

Open Season(s):

Open all year

Length Limit(s):

none - most waters

High Quality Regulations: 75-105 cm (30-41") protected slot - 35 waters

Daily Bag Limit(s):

5 (10 in possession) but only one in catch or possession may be larger than 75 cm (30") - general provincewide

High Quality Regulations: 4 (possession same) but only one may be larger than 105 cm (41") - same 35 waters as with slot length limit

Rationale for Angling Regulations:

Maximum length limits (one over 105 cm) protect the large spawning fish. Slot limits protect the first-time spawners. Smaller fish that fall under the lower end of the slot limit are most abundant and least important for spawning.

Evaluations / Case Histories of Regulation Impacts:

None provided

Contributor (Name, Address, Phone, FAX):

Susan Thompson, Fisheries Technician Supervisor

Yukon Renewable Resources

Box 2703

Whitehorse, Yukon Y1A 2C6

Phone: (403) 667-5199

FAX: (403)393-6263