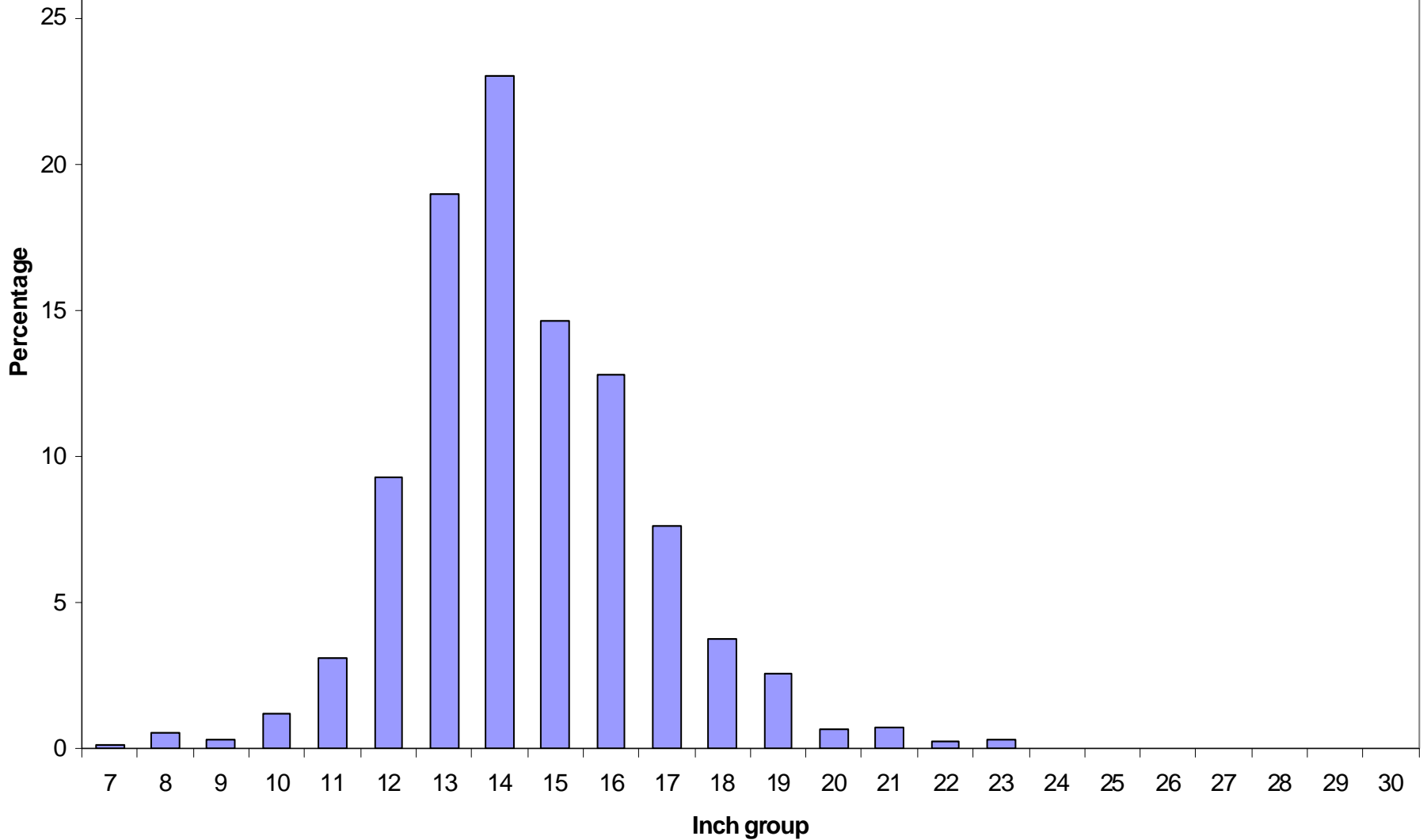


Indian River Chain Walleye Study



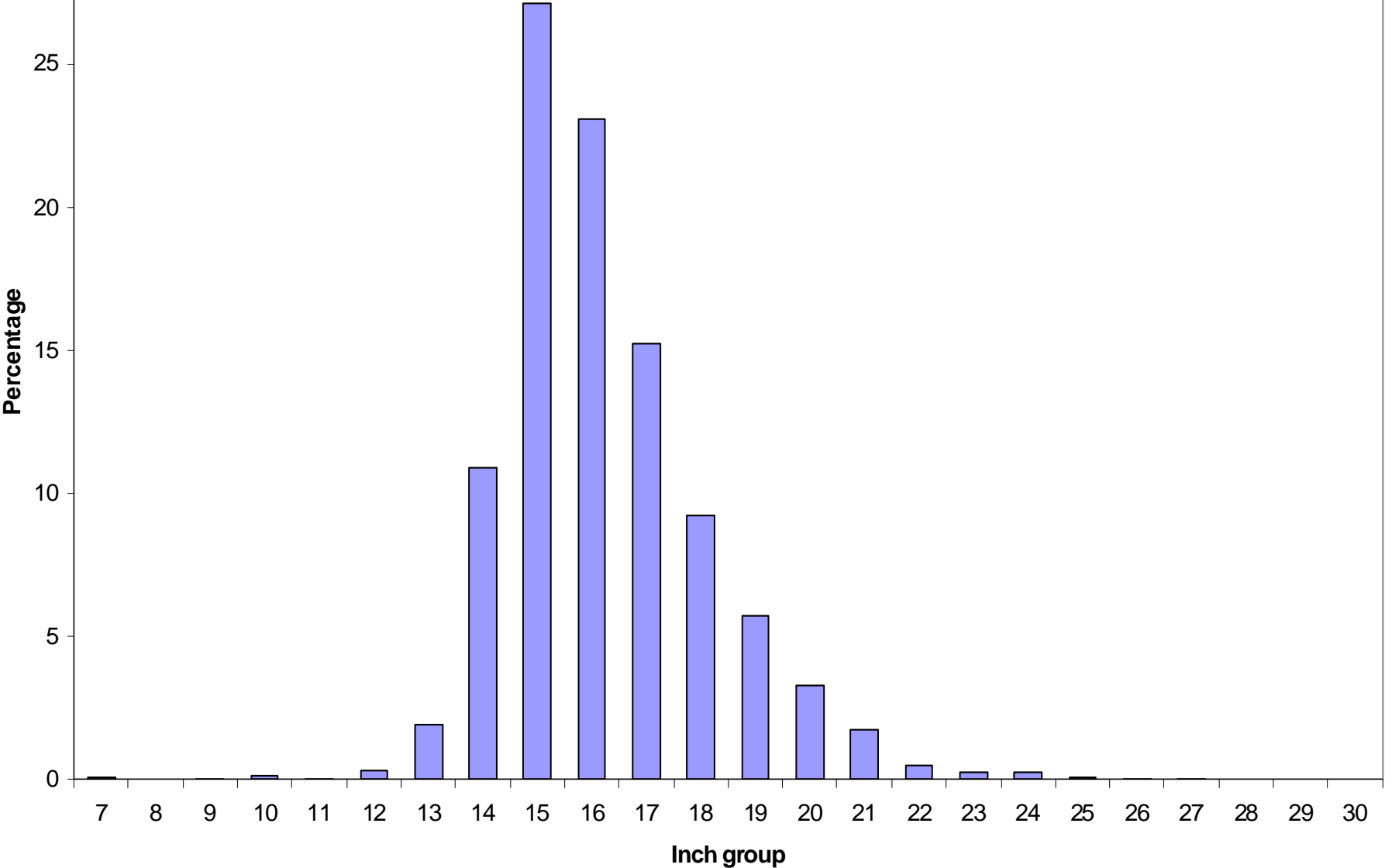


Crooked-Pickerel lakes



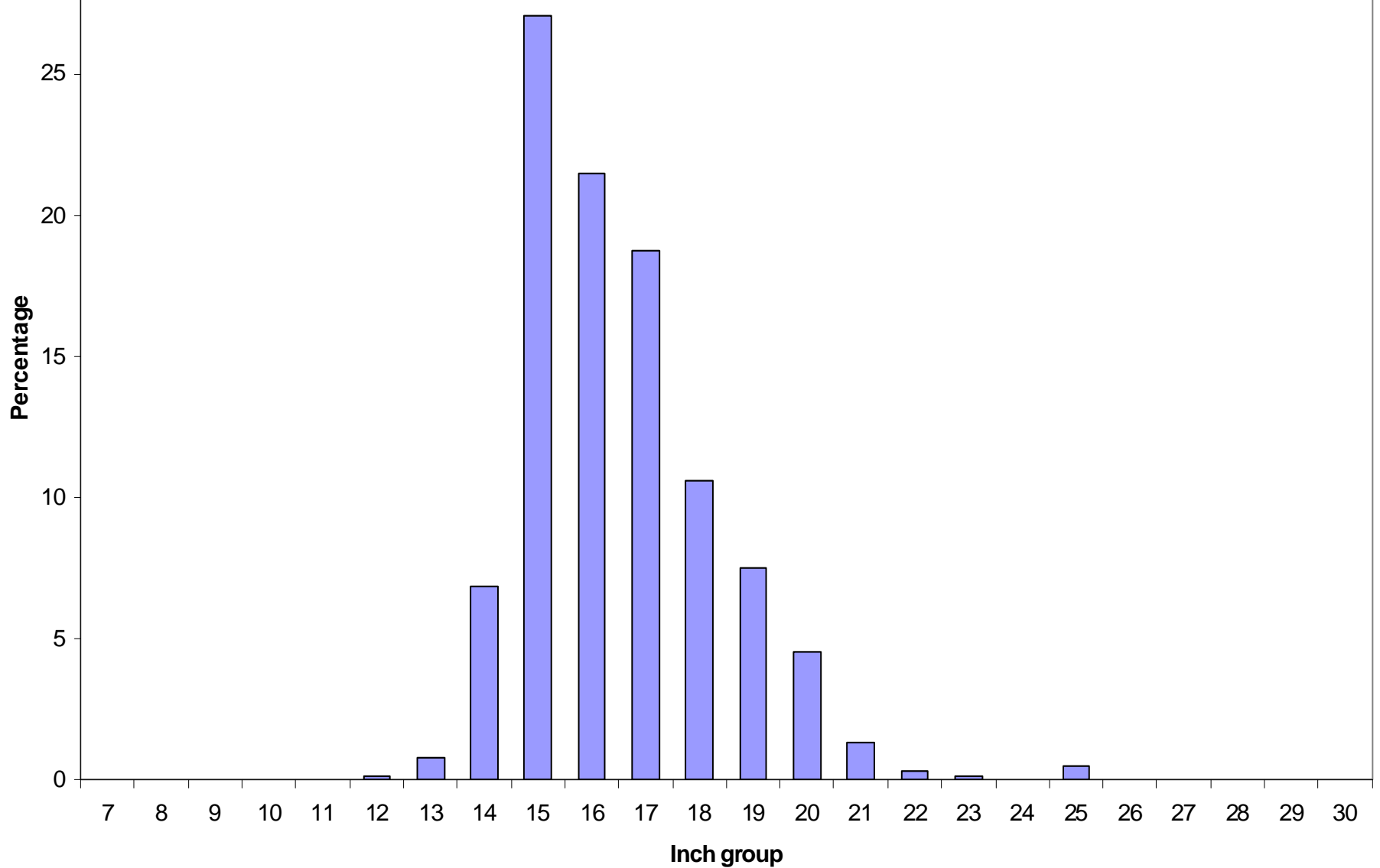


Burt Lake



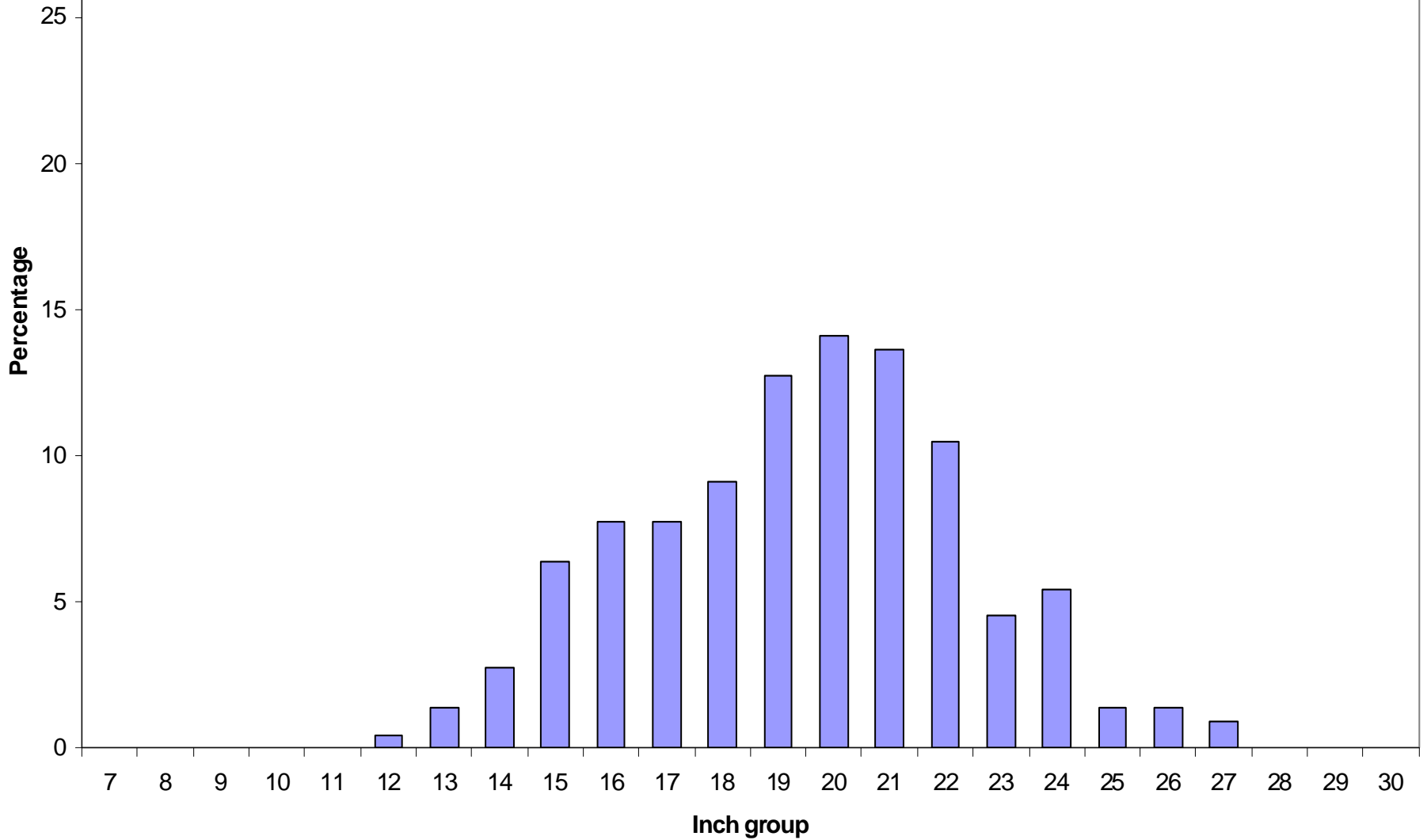


Sturgeon River



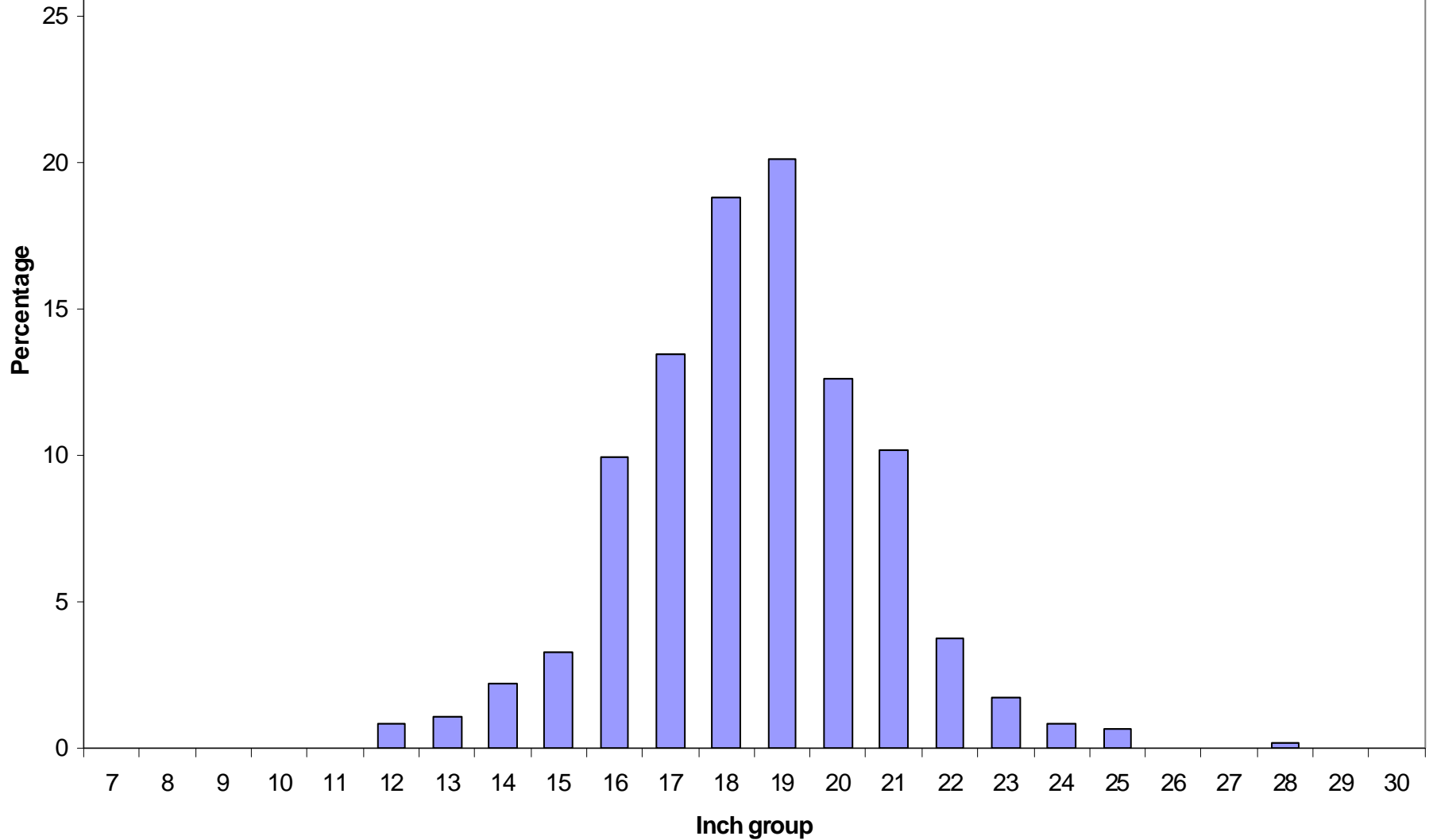


Mullett Lake



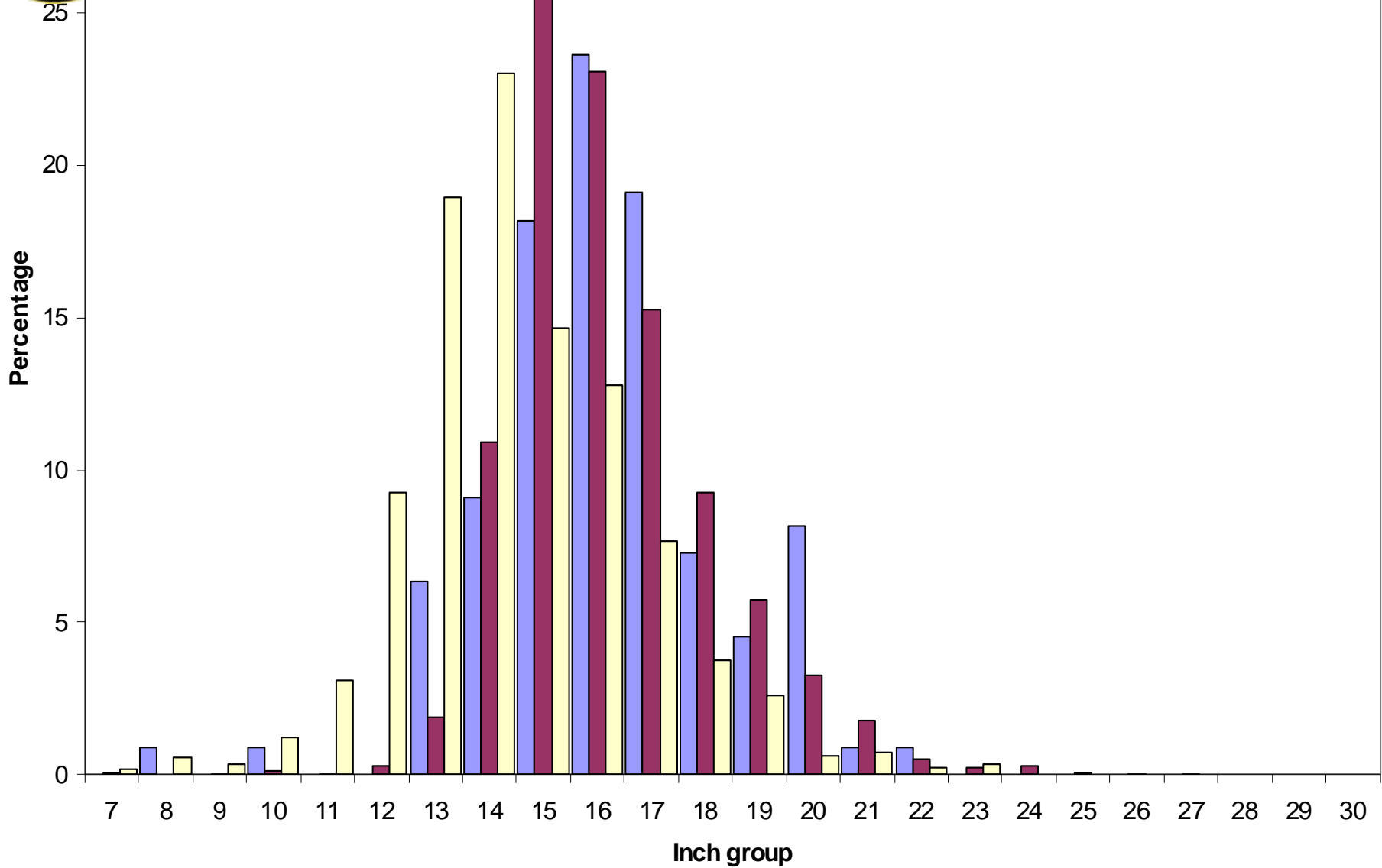
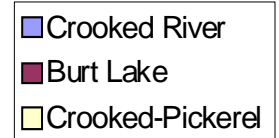


Black and Cheboygan rivers



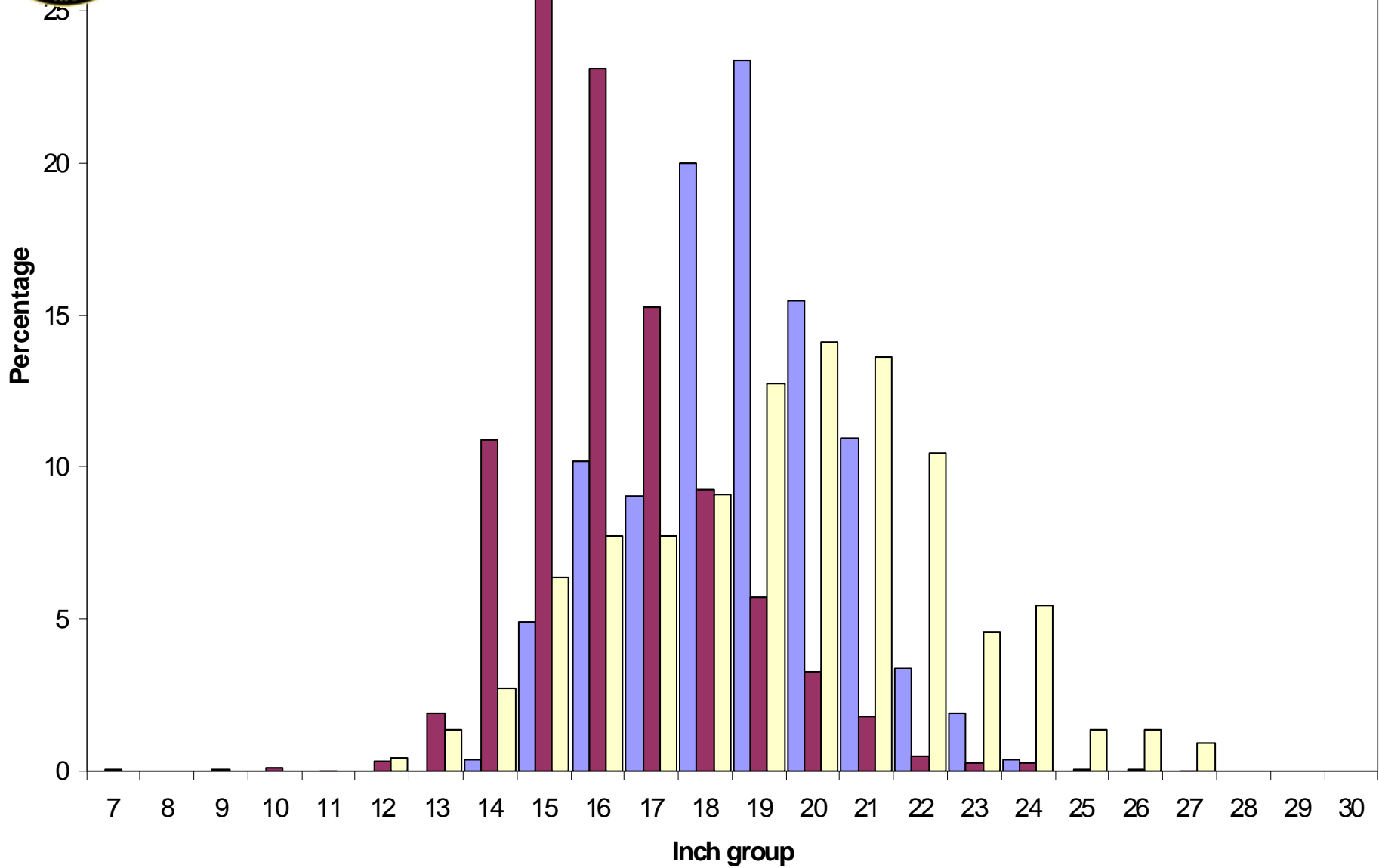
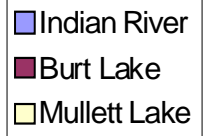


Crooked River





Indian River





Walleye exploitation

2001 (through Oct 20)

- Burt Lake = 6.8%
- Crooked-Pickerel = 14.8%
- Mullett (1998) = 9.2%

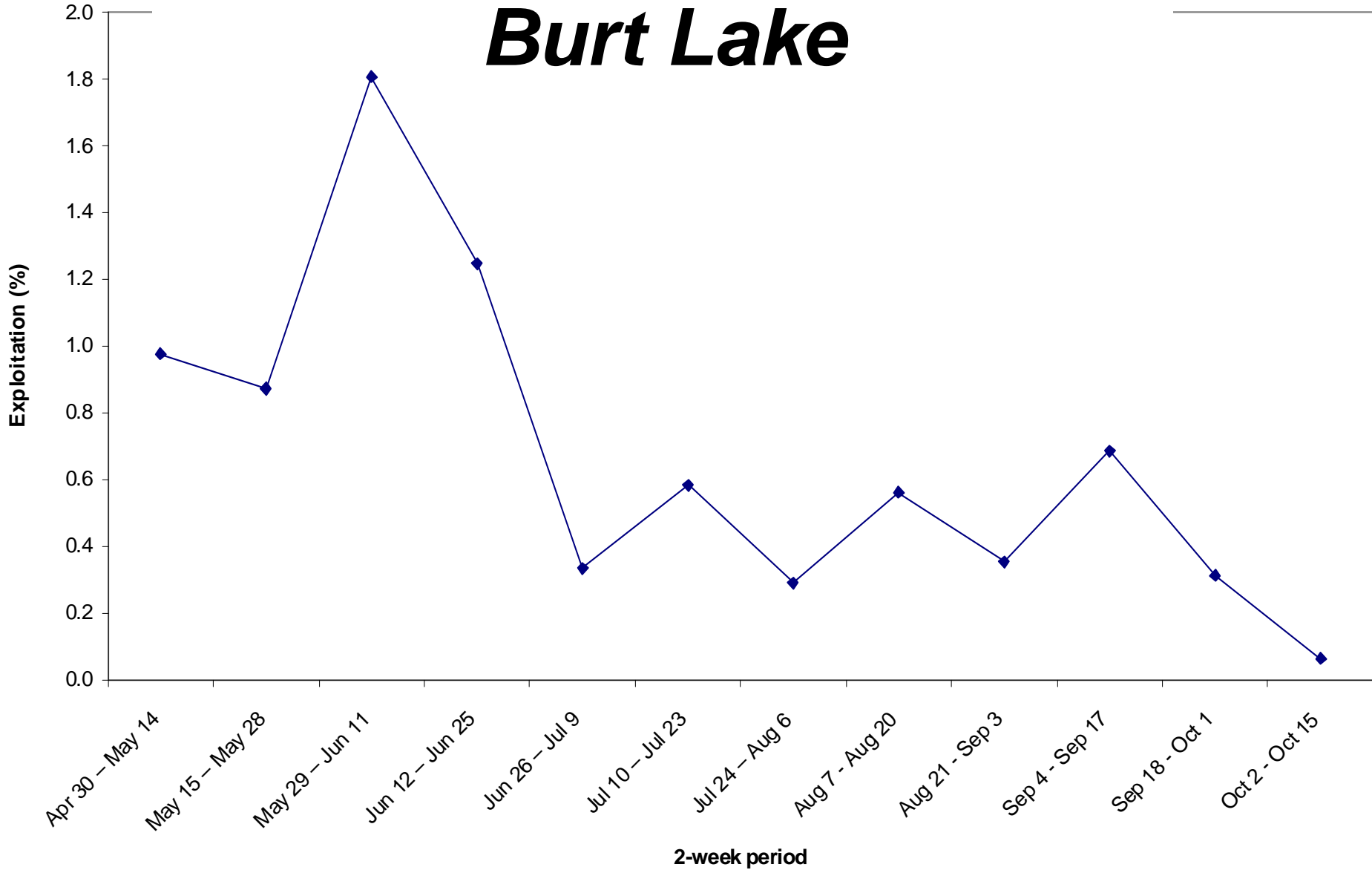
2011 (through Oct 20)

- Burt Lake = 9.5%
- Crooked-Pickerel = 13.3%
- Mullett (2011) = 8.2%

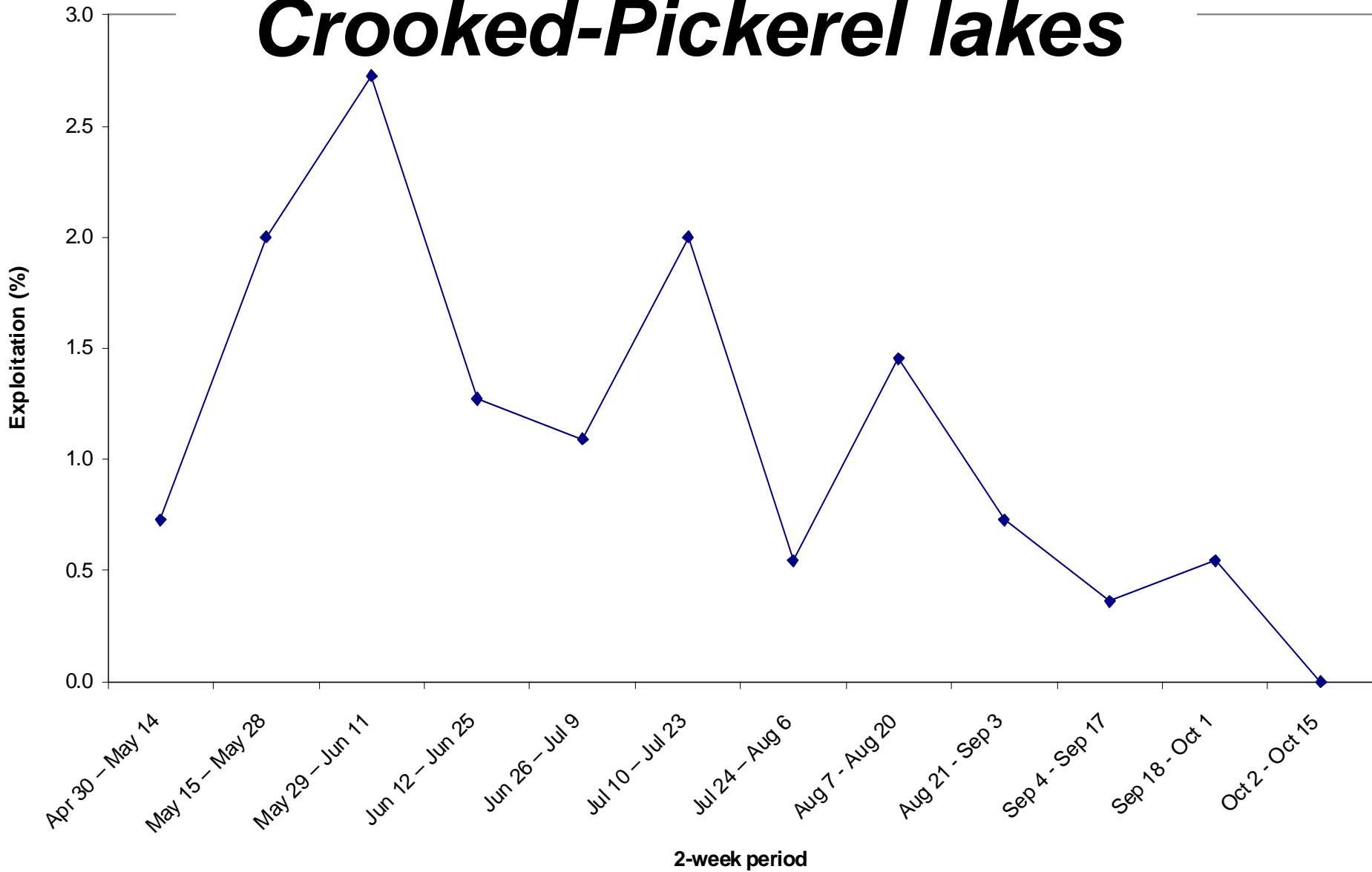


Evaluation of opening day

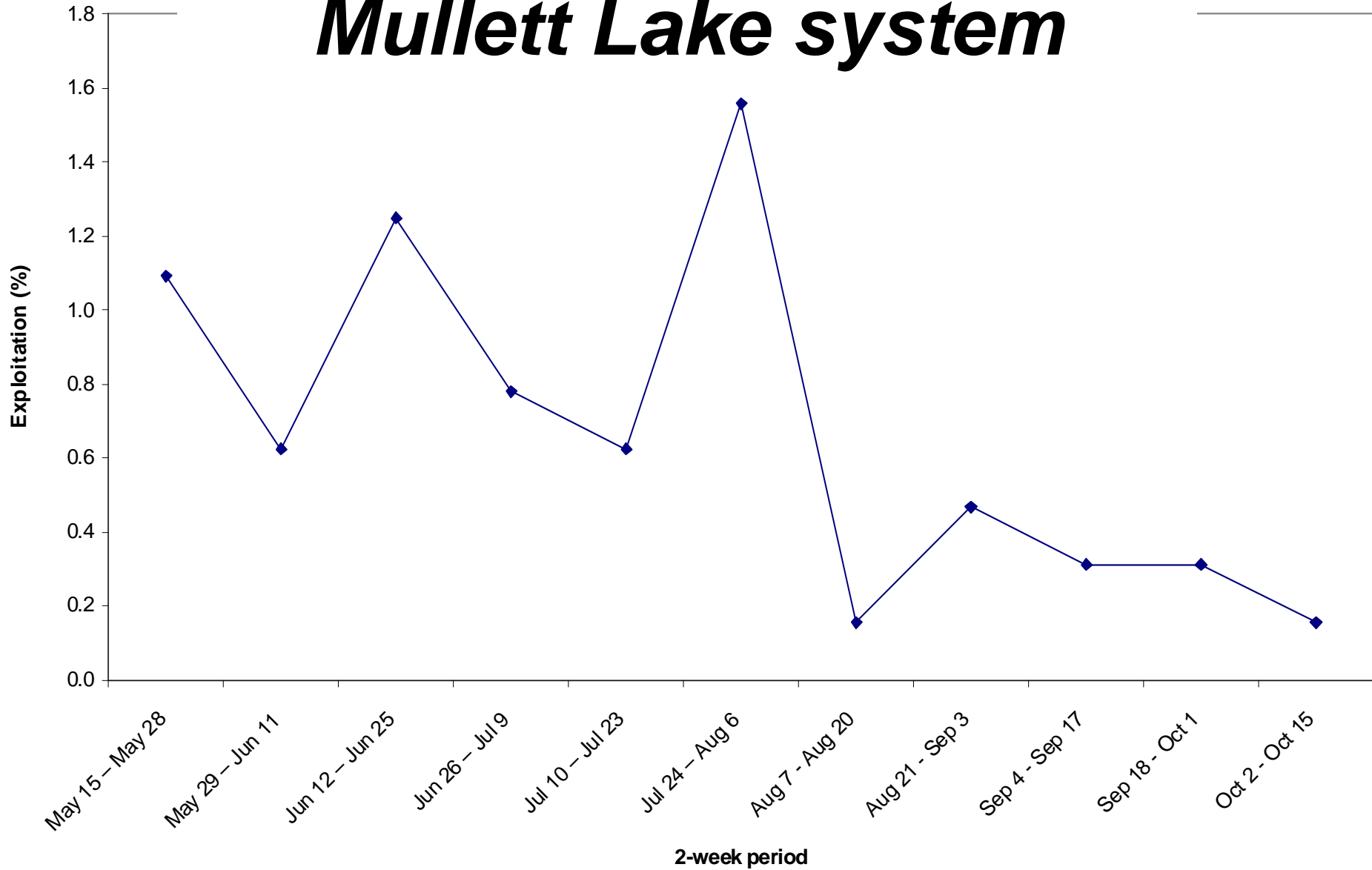
Burt Lake



Evaluation of opening day Crooked-Pickerel lakes



Evaluation of opening day Mullett Lake system

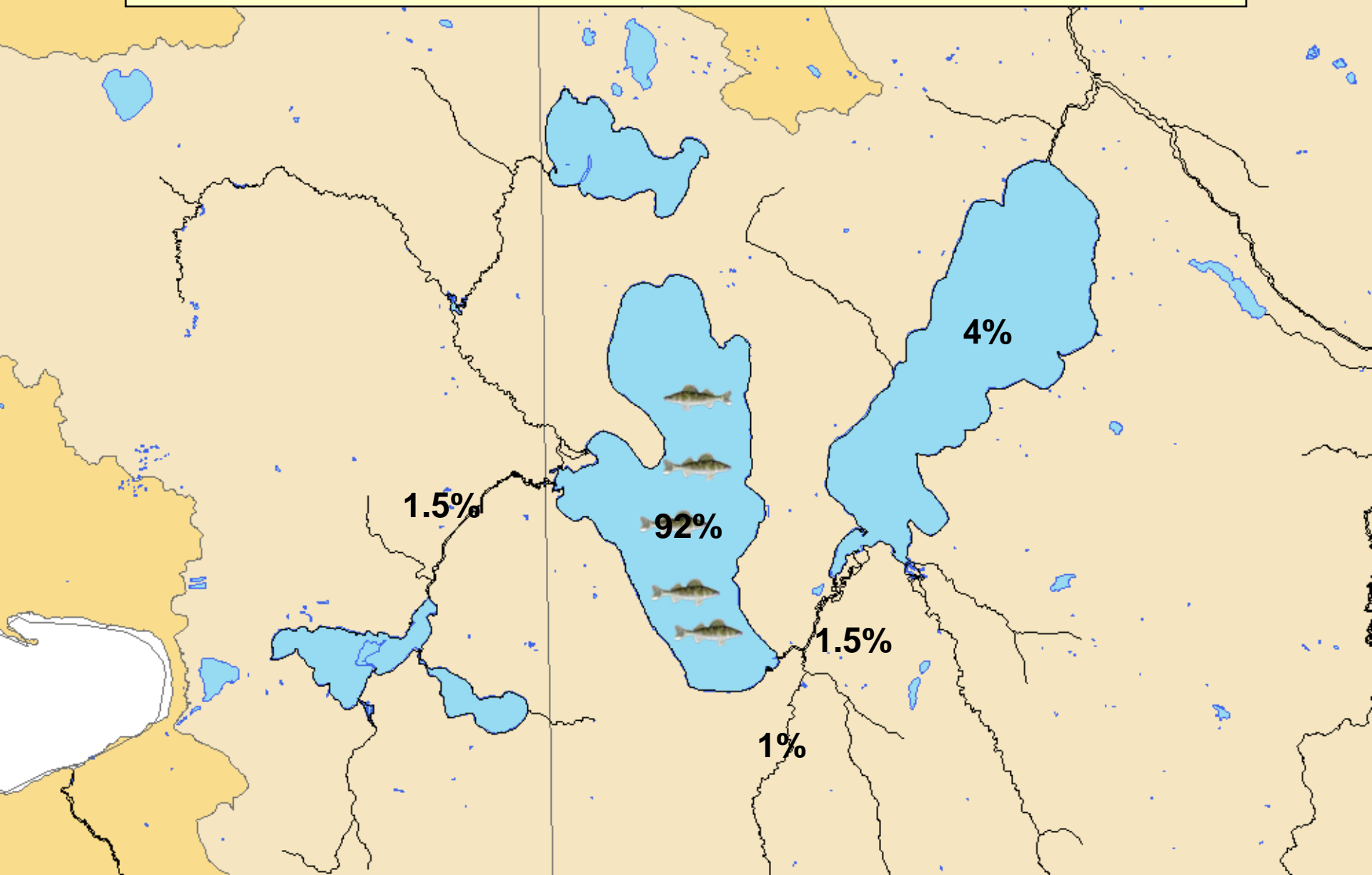




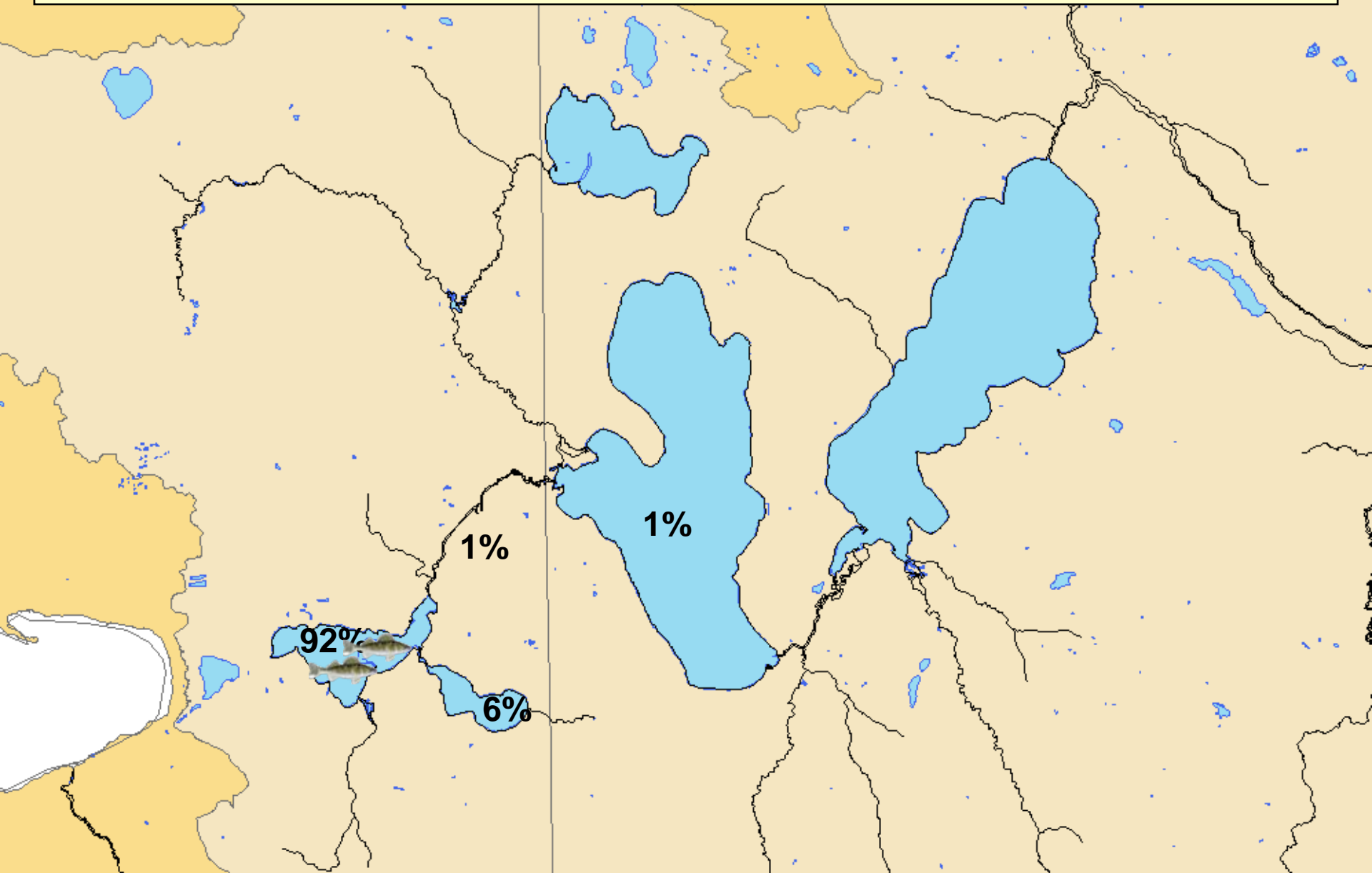
Walleye spring movement

<u>Tagging location</u>	<u>Recapture locations</u>
Crooked Lake	Crooked L. (97%), Pickerel L. (3%)
Pickerel Lake	Pickerel L. (97%), Crooked L. (3%)
Crooked River	Crooked R. (52%), Burt L. (36%), Pickerel L. (9%), Indian R. (3%)
Burt Lake	Burt L. (96%), Sturgeon R. (2%), Indian R. (2%), Pickerel (0.3%)
Sturgeon River	Burt L. (48%), Sturgeon R. (46%), Indian R. (6%)
Indian River	Indian R. (74%), Burt L. (21%), Sturgeon R. (5%)
Mullett Lake	Cheb. R. (44%), Mullett L. (33%), Black R. (11%), Sturg. R. (11%)
Cheboygan River	Cheboygan R. (70%), Mullett L. (19%), Black R. (11%)
Black River	Black R. (91%), Cheboygan R. (5%), Mullett L. (4%)

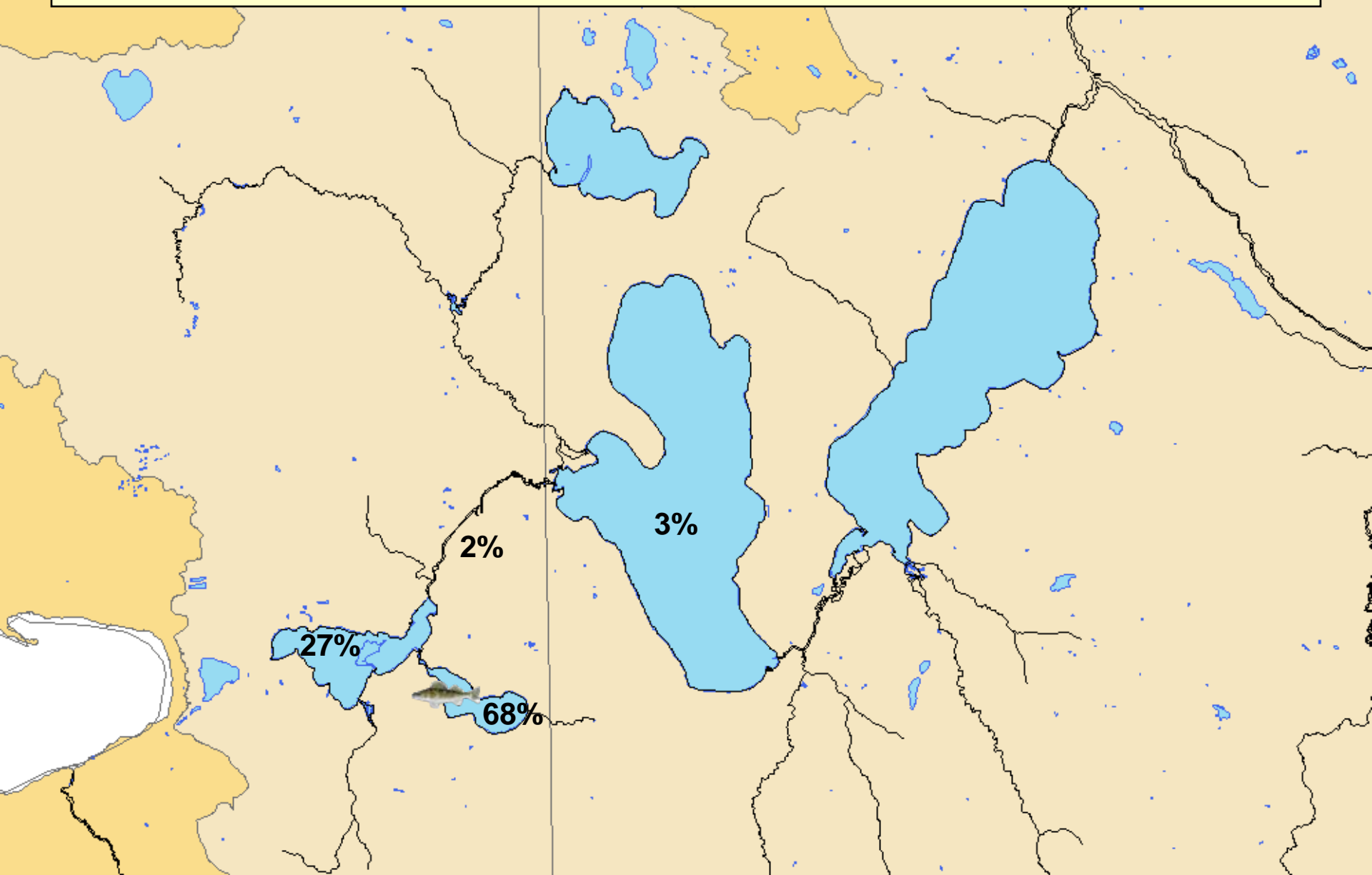
Burt Lake walleye movement



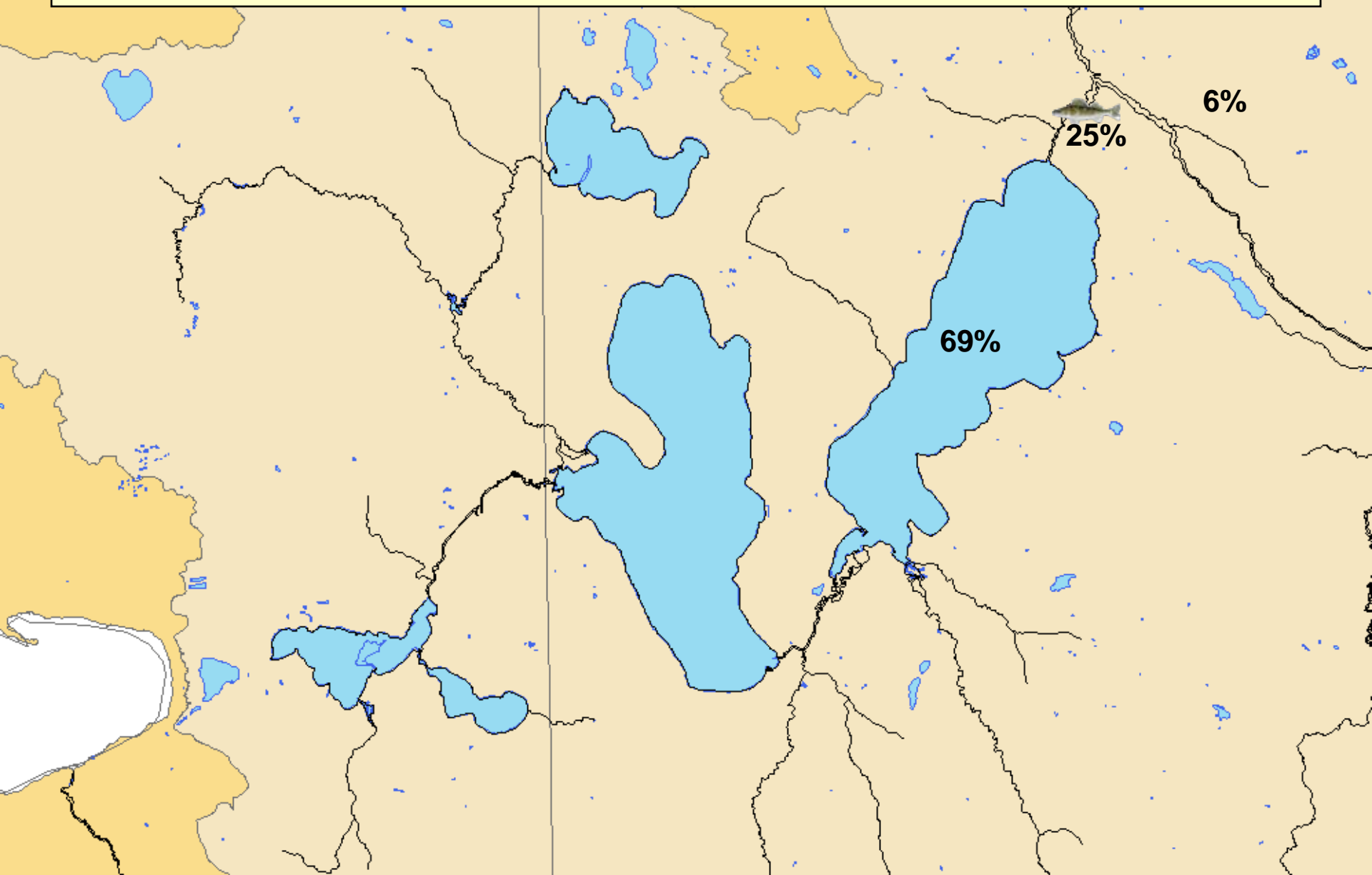
Crooked Lake walleye movement



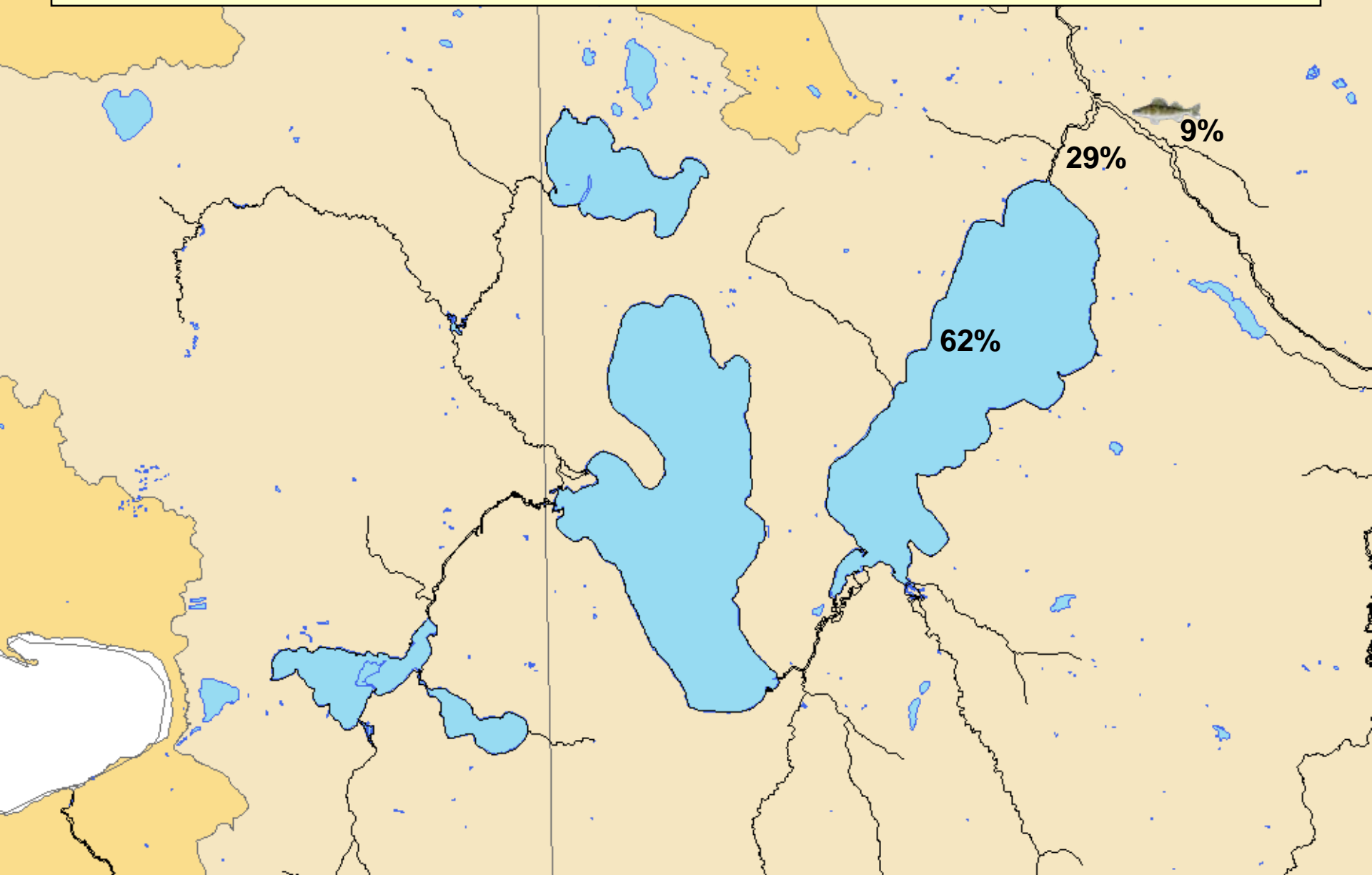
Pickerel Lake walleye movement



Cheboygan R. walleye movement



Black R. walleye movement





Walleye post-spawn movement cont.

<u>Tagging location</u>	<u>Recapture locations</u>
Crooked River	Burt L. (63%), Crooked R. (19%), Crooked L. (12%), Pickerel (6%)
Sturgeon River	Burt L. (80%), Mullett L. (11%), Sturgeon R. (4.5%), Indian R. (4.5%)
Indian River	Burt L. (60%), Mullett L. (35%), Indian R. (5%)
Mullett Lake	Mullett L. (87%), Cheboygan R. (7%), Burt Lake (7%)



Walleye abundance – Burt Lake

- 42,032 adults in 2001 and 19,464 in 2011, but, very different methods were used
- The best comparison for examining change utilizes the same method for estimating abundance
- 21,832 adults in 2001 and 25,446 in 2011
- Walleye abundance in Burt Lake is very similar to what it was in 2001.



Walleye abundance – Crooked-Pickerel lakes

- 12,346 adults in 2001 and 6,565 in 2011, but, very different methods were used
- The best comparison for examining change utilizes the same method for estimating abundance
- 9,552 adults in 2001 and 5,415 in 2011
- Walleye abundance in Crooked-Pickerel is likely lower than what it was in 2001.



Walleye abundance – Mullett Lake system

- **2,648 adults in 2009 and 2,024 in 2011 utilizing exact same method**

- **Walleye abundance in Mullett Lake is lower than 1998, but similar to 2009**



Questions?





Northern pike abundance





Northern pike abundance

- **Burt Lake = 1,779 adult pike (0.1/acre) in 2001 (2.4 adult walleye/acre)**
- **Crooked-Pickerel = 1,921 adult pike (0.6/acre) in 2001 (3.6 adult walleye/acre)**
- **Black Lake = 8,826 (0.9/acre) in 2005 (1.4 adult walleye/acre)**
- **Median value from Large Lakes Program = 0.5/acre**





Northern pike abundance

Northern pike	2001/2005	2011
• Burt Lake	0.4/trap	1.2/trap
• Crooked-Pickerel	2.5/trap	1.9/trap
• Black Lake	3.5/trap	

Walleye	2001/2005	2011
• Burt Lake	5.6/trap	30.4/trap
• Crooked-Pickerel	11.7/trap	6.4/trap
• Black Lake	2.6/trap	



Do northern pike compete with walleyes?

