



The Long Lake Fishery

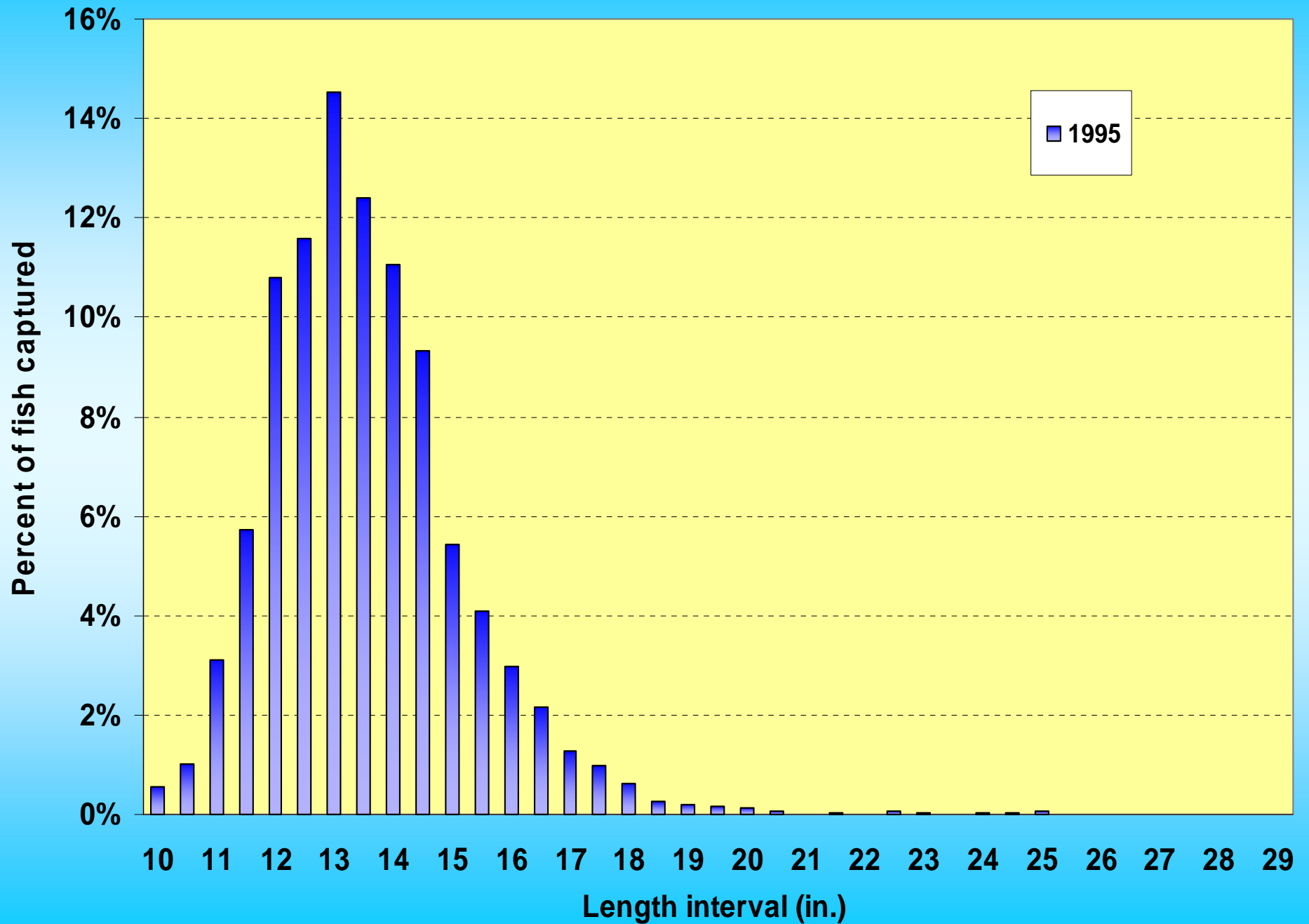
1995 to 2008

Joe Kurz, Wisconsin DNR

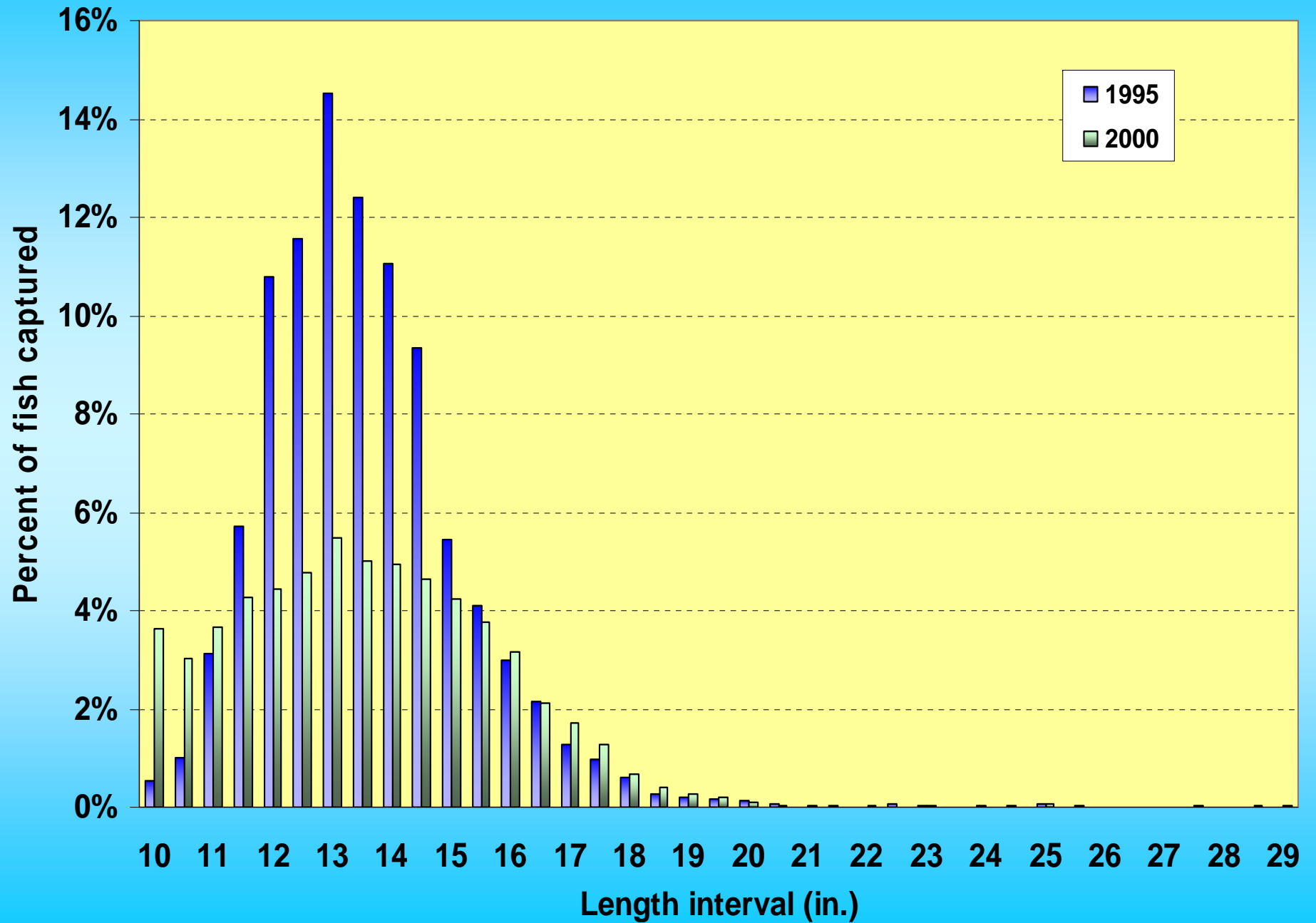
Walleye Regulations

- **1989** - went from no size limit to a minimum size limit of 15" with a daily bag limit of 5 fish
- **1993** - tribal harvest began and has occurred annually since 1993
 - -daily bag limits reduced to 2 for 13 years
 - -daily bag limits reduced to 3 for 3 years
- **1997** - a protected slot size of 14"-18" and only one fish >18" can be harvested daily

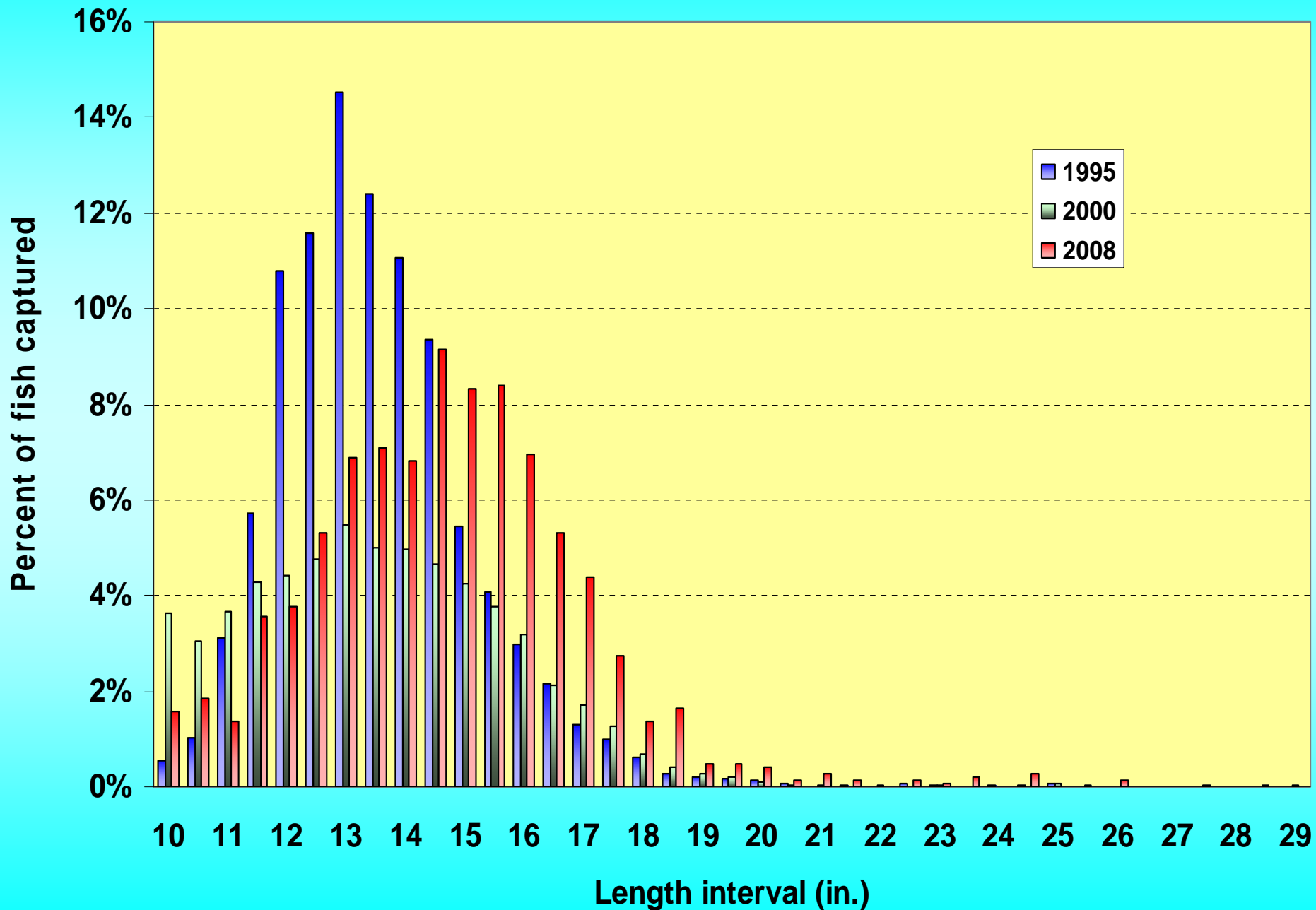
Walleye size structure in Long Lake from a spring netting surveys



Walleye size structure in Long Lake from netting surveys



Walleye size structure in Long Lake from spring netting surveys



Walleye Size Structure

- **Percent of fish $\geq 10''$ that were $\geq 15''$**

- 1995 – 19%
- 2000 – 29%
- 2008 – 47%

- **Percent of fish $\geq 10''$ that were $\geq 20''$**

- 1995 – 0.5%
- 2000 – 0.6%
- 2008 – 2.0%

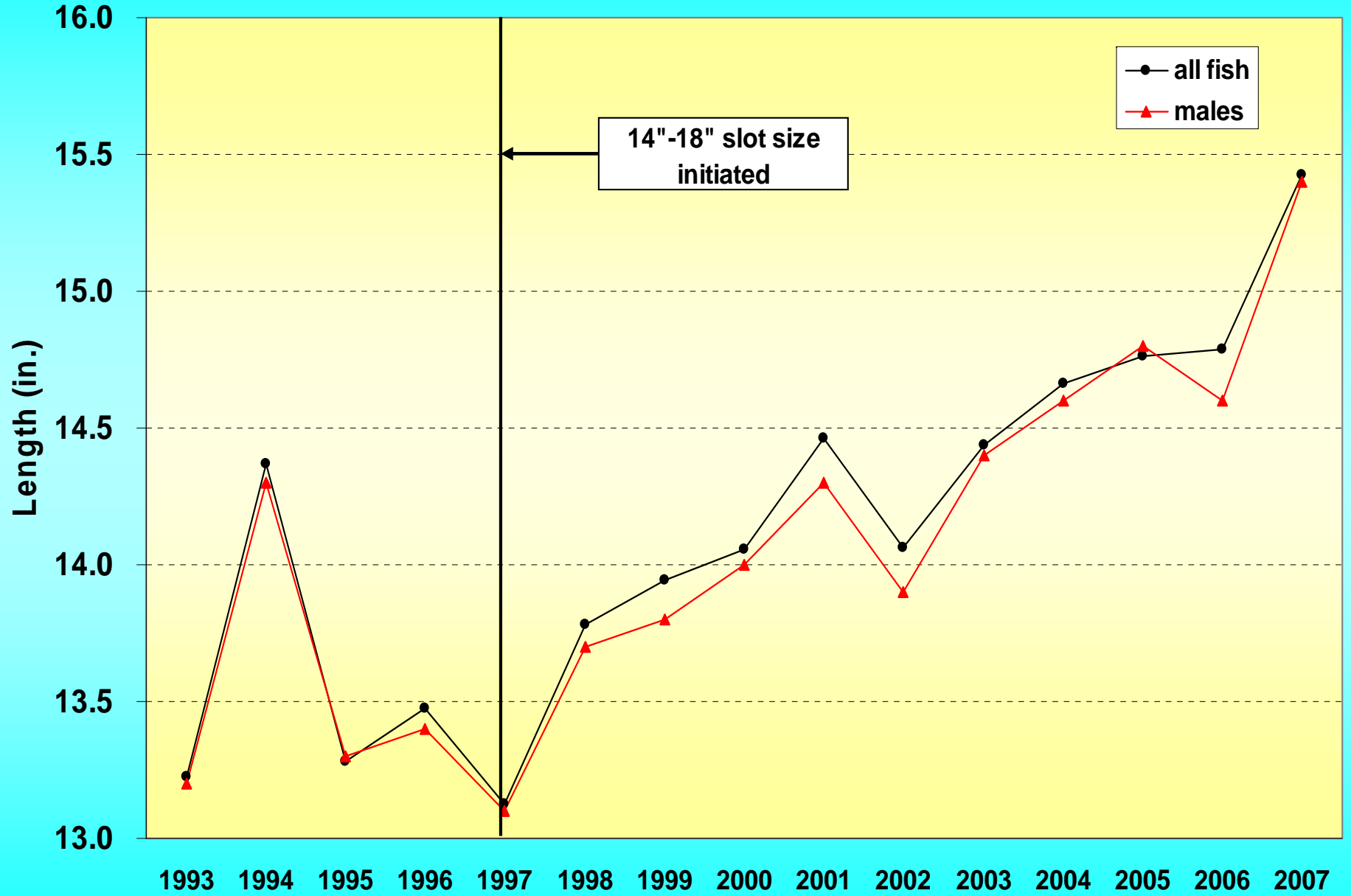
Walleye Sex Ratios

- 1995 – 12 males to every female
- 2000 – 10 males to every female
- 2008 – 4 males to every female

Walleye Adult Densities

- 1995 – 6.2 adults per acre
- 2000 – 4.5 adults per acre
- 2008 – 6.9 adults per acre

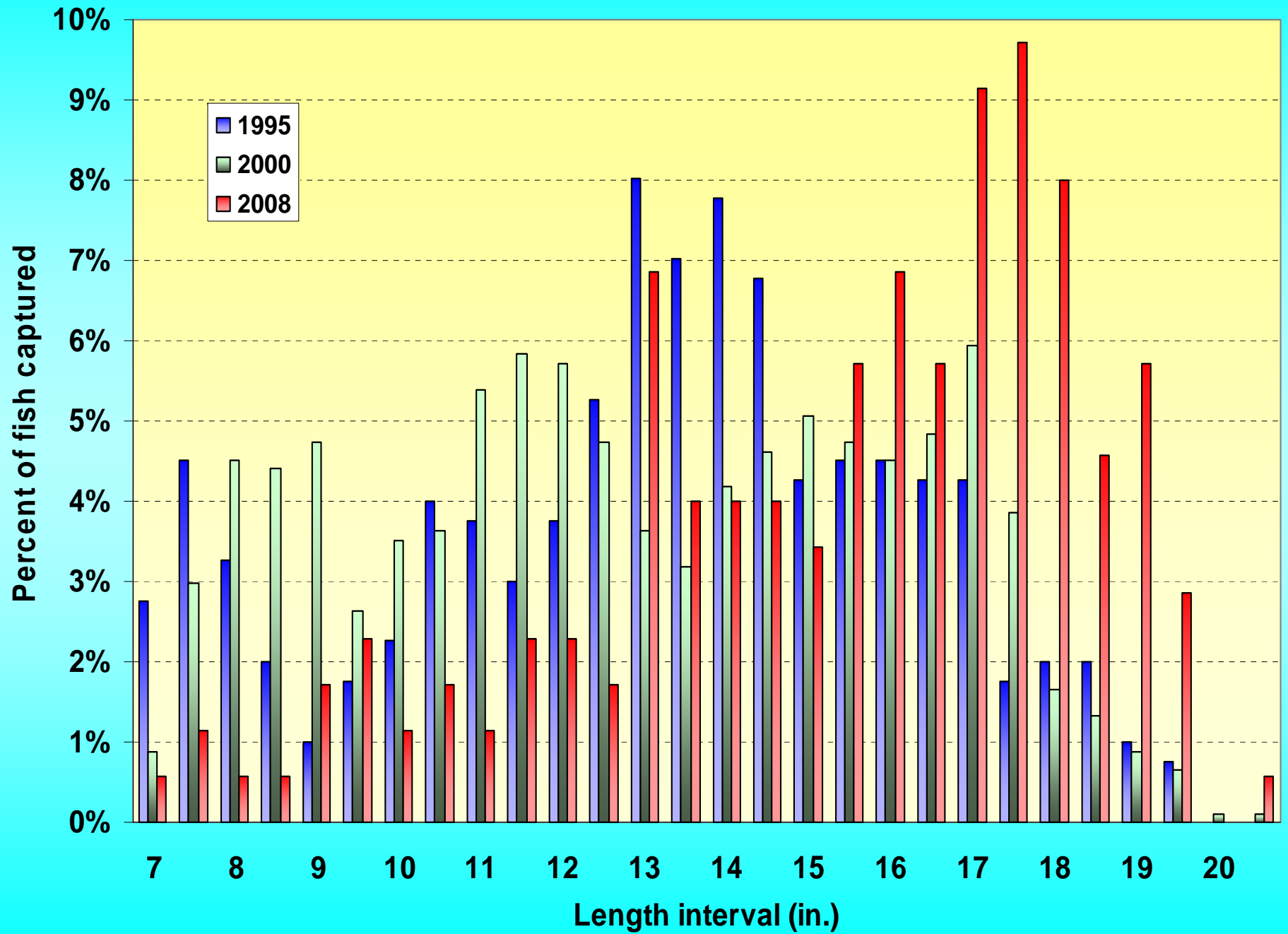
Average length of walleye in the Long Lake tribal harvest



Bass Regulations

- **1989 – went from no size limit to a minimum size of 14” with a daily bag limit of 5 fish**
- **1999 – minimum size limit increased to 18” with a daily bag limit of 1 fish**

Smallmouth bass size structure in Long Lake from spring surveys



Smallmouth Bass Size Structure

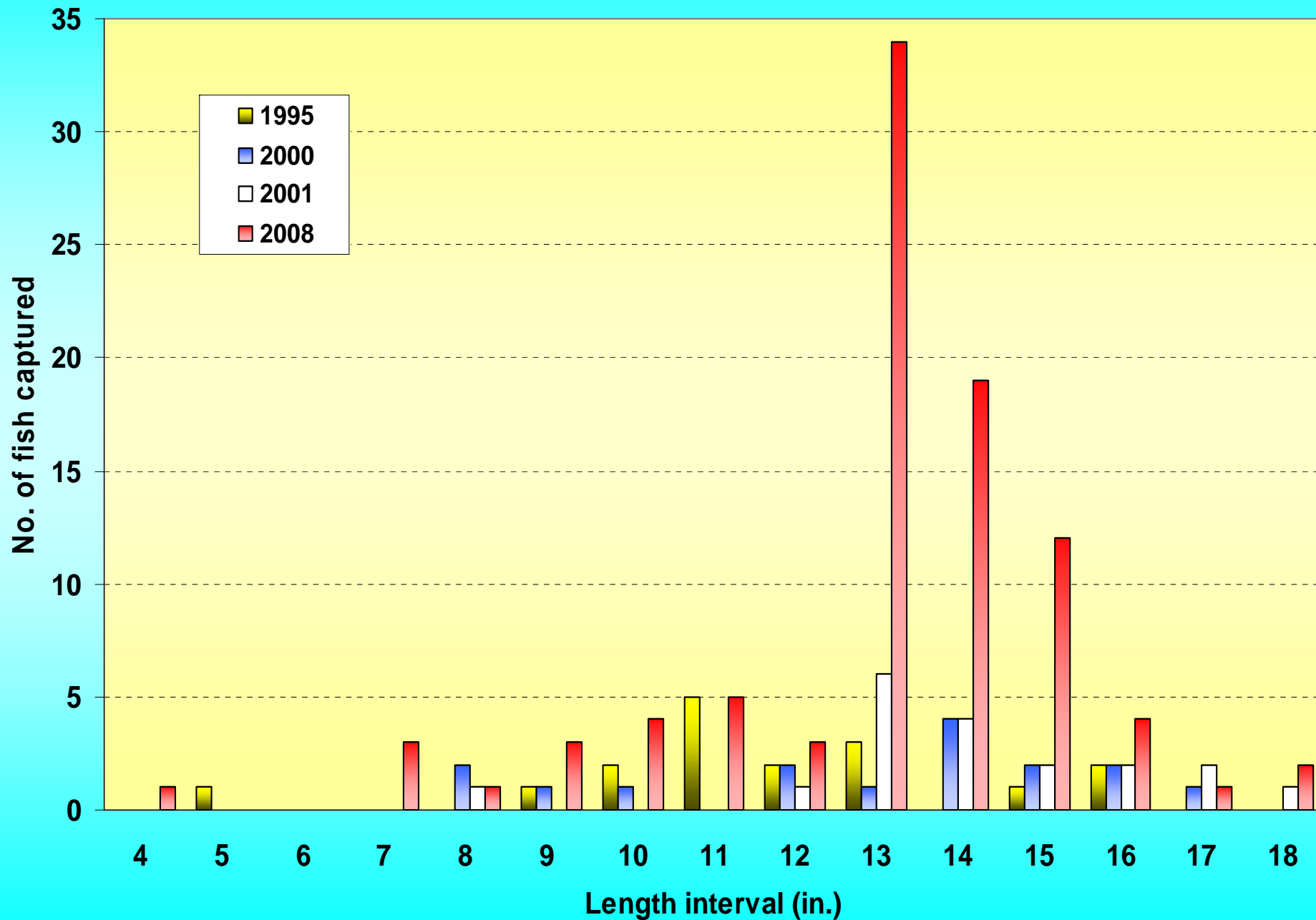
- Percent of fish $\geq 7''$ that were $\geq 14''$

- 1995 – 46%
- 2000 – 43%
- 2008 – 72%

- Percent of fish $> 7''$ that were $> 17''$

- 1995 – 12%
- 2000 – 15%
- 2008 – 41%

Largemouth bass size structure in Long Lake from spring surveys



Largemouth Bass Catch Per Effort

- **Spring**

- 1995 – 0.9 fish/hour
- 2000 – 1.2 fish/hour
- 2008 – 13 fish/hour

- **Fall**

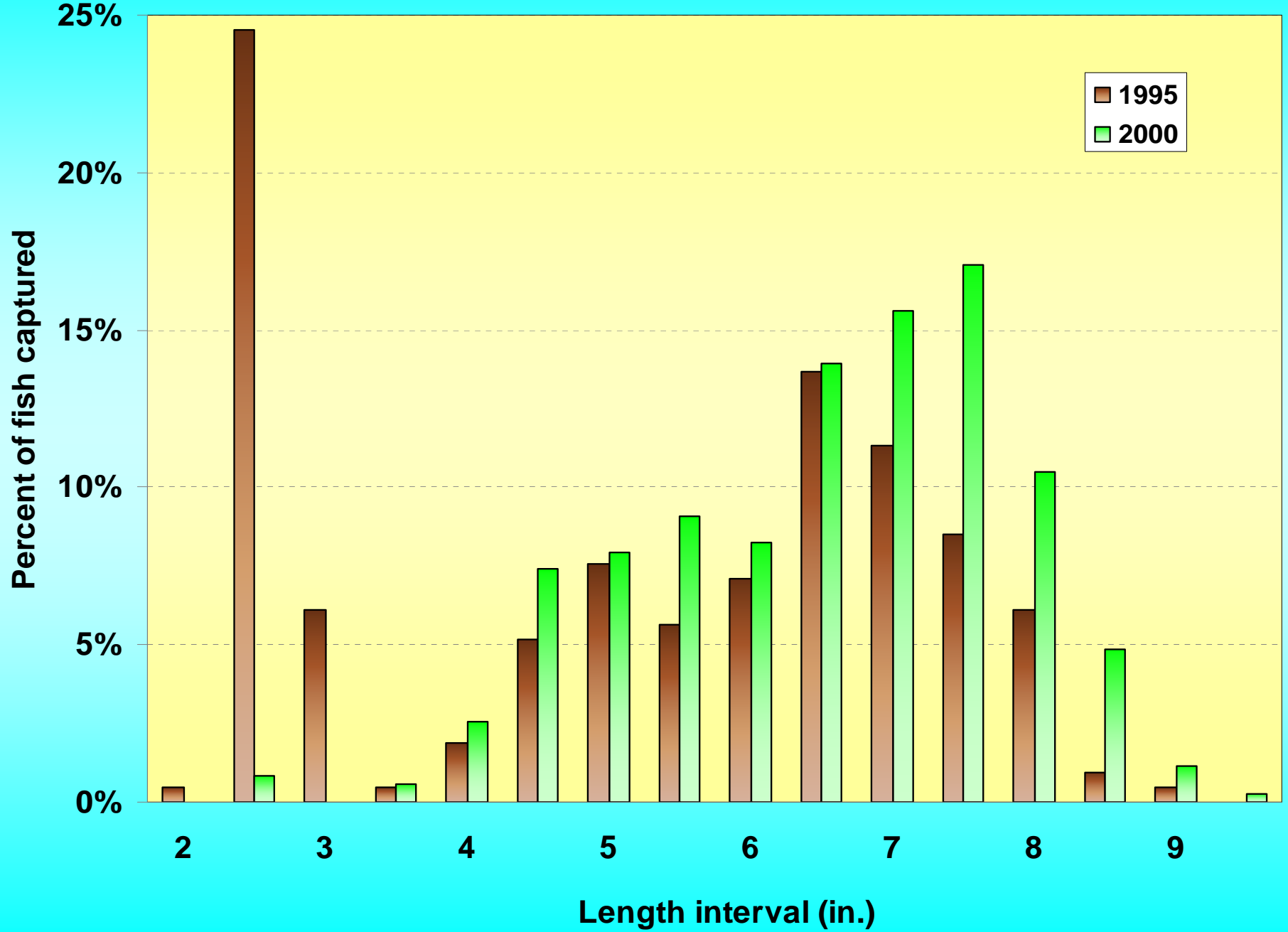
- 2003 – 12 fish/hour
- 2006 – 30 fish/hour

Panfish Regulations

- **(excluding rock bass)**

- 1997 – daily bag limit decreased from 50 to 25 fish in aggregate
- 2000 – daily bag limit decreased to 10 fish in aggregate

Bluegill size structure in Long Lake from summer surveys



Bluegill Catch Per Effort

- **June 1995 – 4.4 fish/hour**
- **June 2008 – 62.3 fish/hour**

Musky Regulations

- 1995 – minimum size limit increased from 32” to 34” with a daily bag limit of 1 fish

Musky Catch Per Effort from Spring Netting

- **1982 – 0.35 fish/net lift**
- **1995 – 0.20 fish/net lift**
- **2008 – 0.22 fish/net lift**

Musky Adult Density

- **A 2000-2001 survey yielded an estimate of 0.2 adults per acre or 1 adult musky for every 5 acres**

Comparison of Angler Creel Surveys Conducted in Long Lake

Survey year	Percent of total effort ¹	Hours per fish caught	Hours per fish harvested	Estimated total harvest	Average size harvested
Walleye					
1995	56.8%	2	18	608	16.3"
2000	39.0%	2	11	1,323	13.3"
Smallmouth bass					
1995	19.4%	5	41	89	17.0"
2000	31.6%	2	323	50	18.3"
Muskellunge					
1995	6.6%	25	182	10	43.3"
2000	8.0%	72	714	4	-
Northern pike					
1995	4.6%	14	28	37	23.8"
2000	3.7%	13	196	29	25.5"
Bluegill					
1995	4.4%	3	7	121	7.7"
2000	5.3%	1	3	868	7.6"

¹Estimated total fishing pressure (total effort)

1995 - 14.9 hours per acre

2000 - 25.3 hours per acre