

Smith Mountain Striper Club - 2023



Dan Wilson



SML Striped Bass Stocking



- 2016 - 2020 averaged 364,000/yr
- 2021 = 284,000
- 2022 = 330,000
- 2023 = Later in the presentation



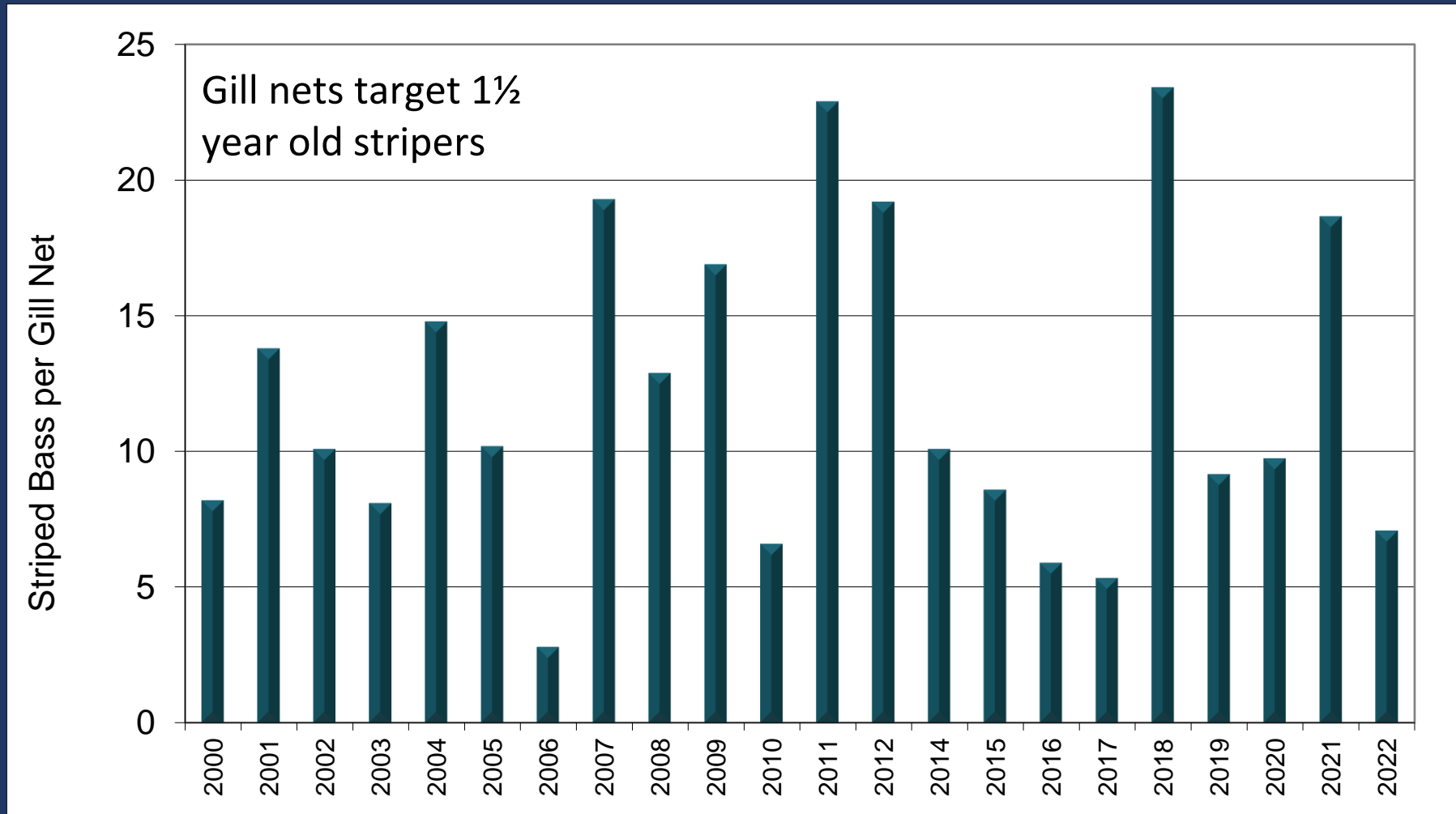
Stocking – Truck vs Boat

	Truck	Boat
2019	46%	54%
2020	73%	27%
2021	71%	29%
2022	30%	70%

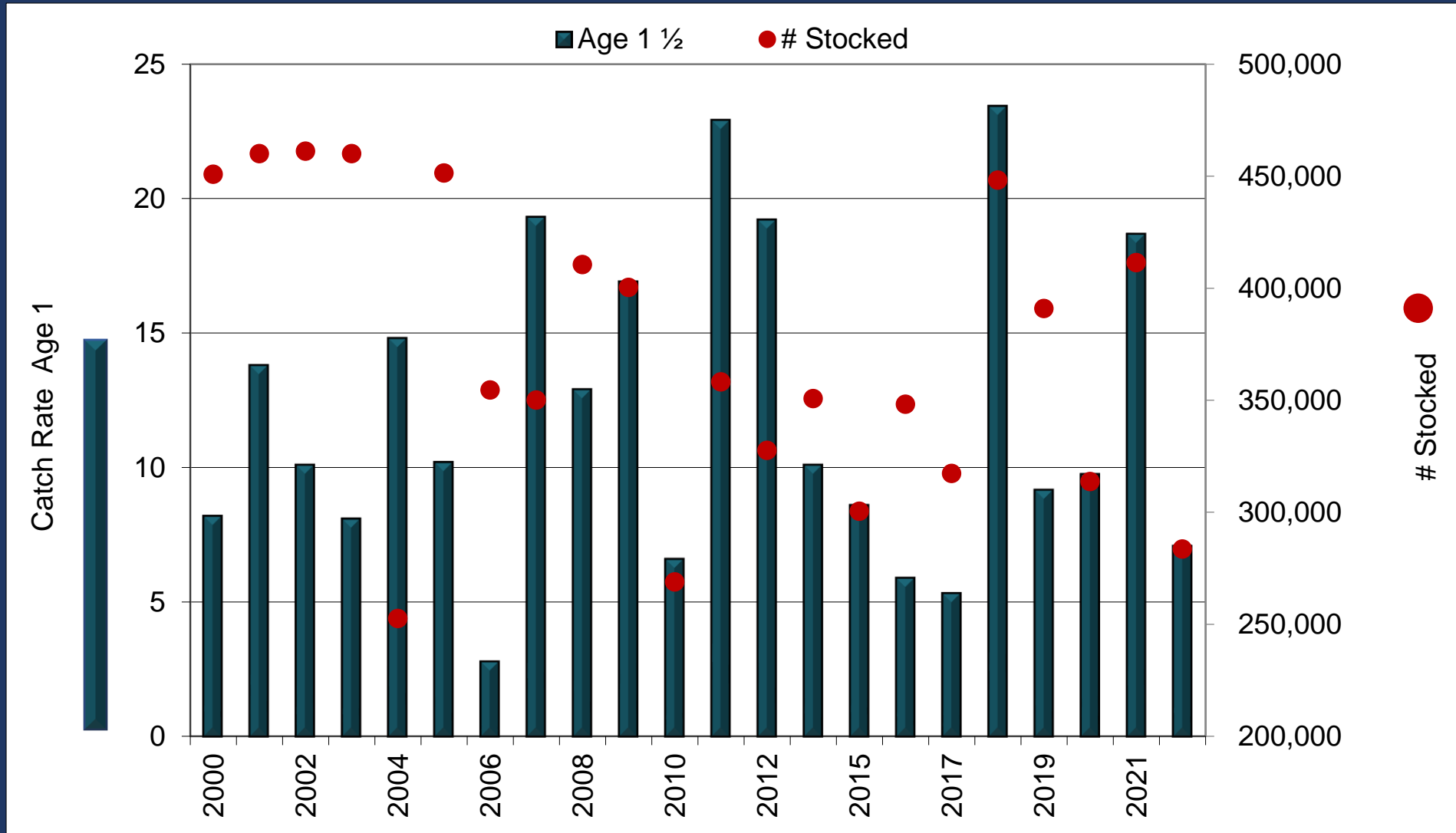
Boat Stocking



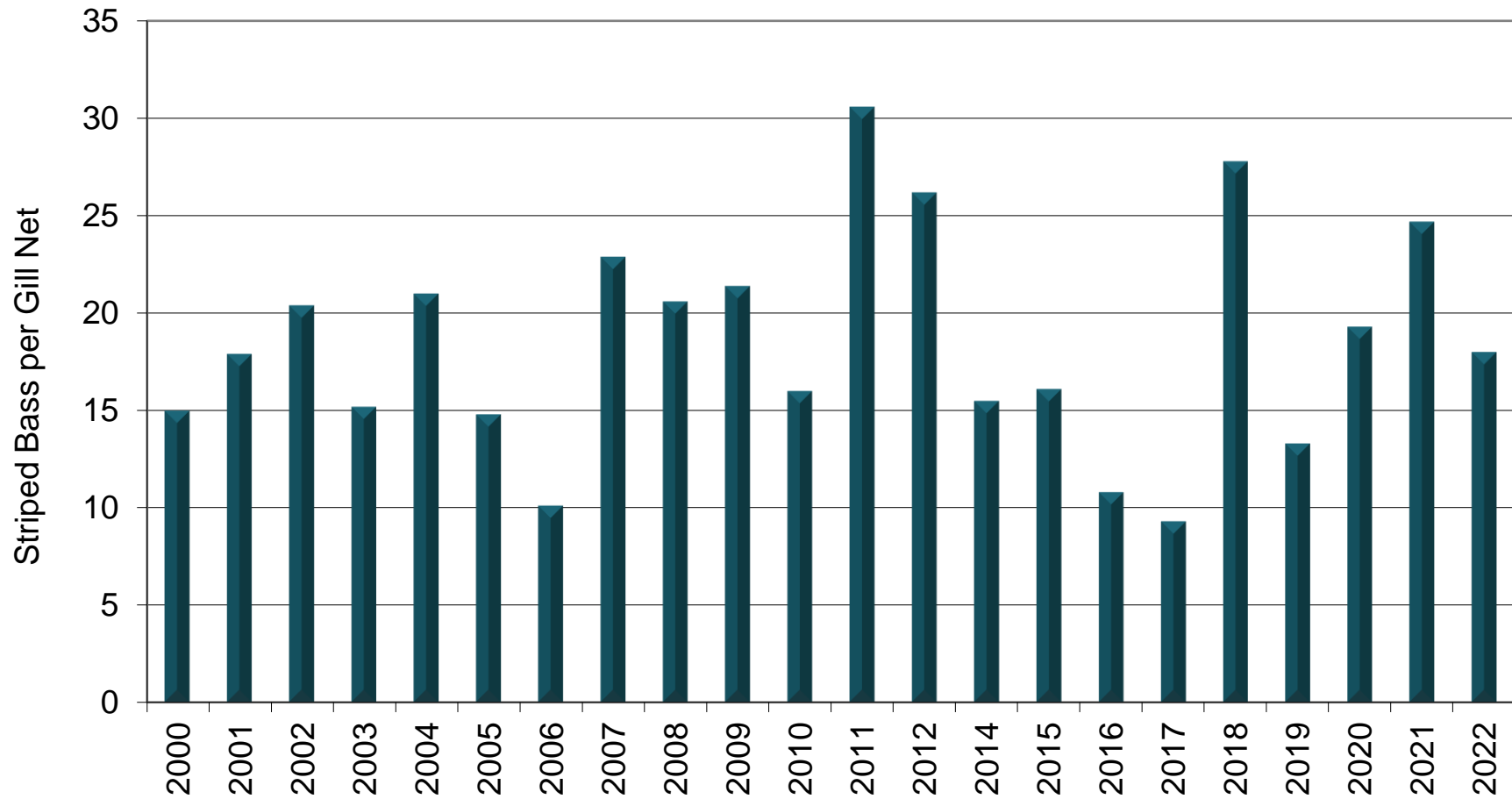
Gill Nets - Striped Bass Age 1½



Gill Nets & Stocking Rate

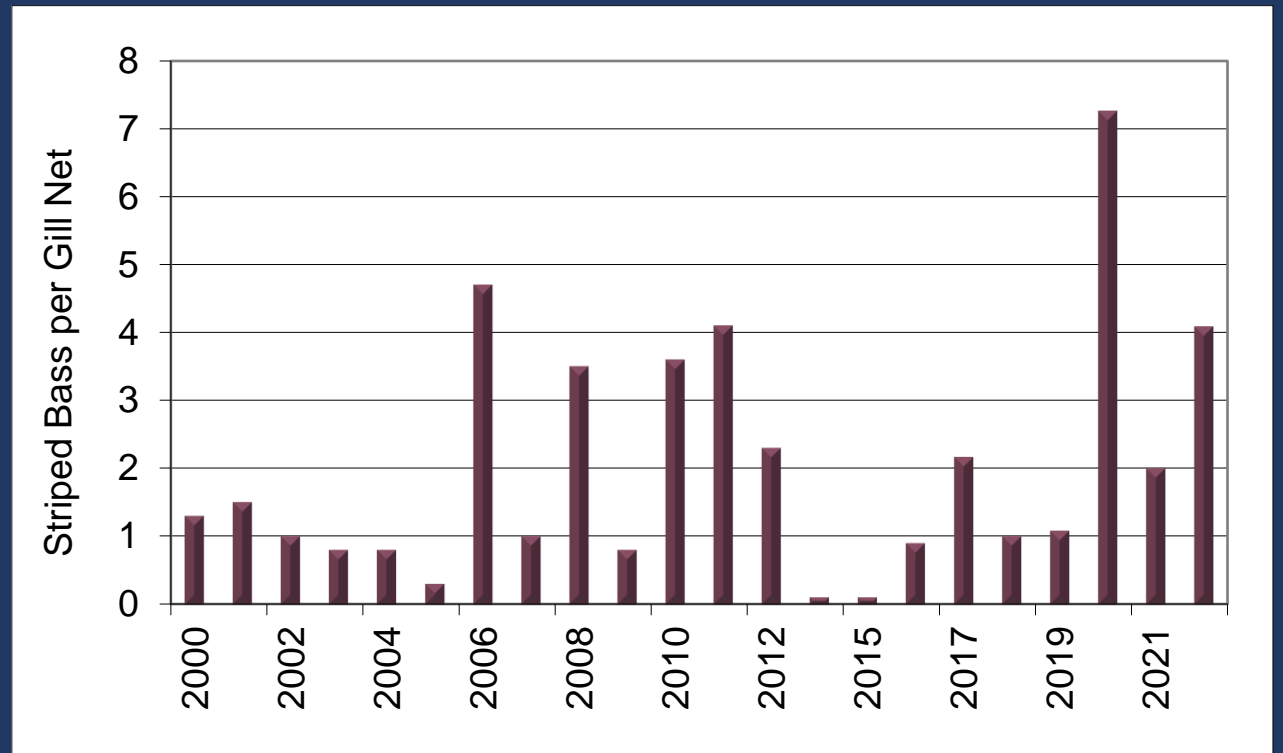


Gill Nets - Striped Bass All Ages

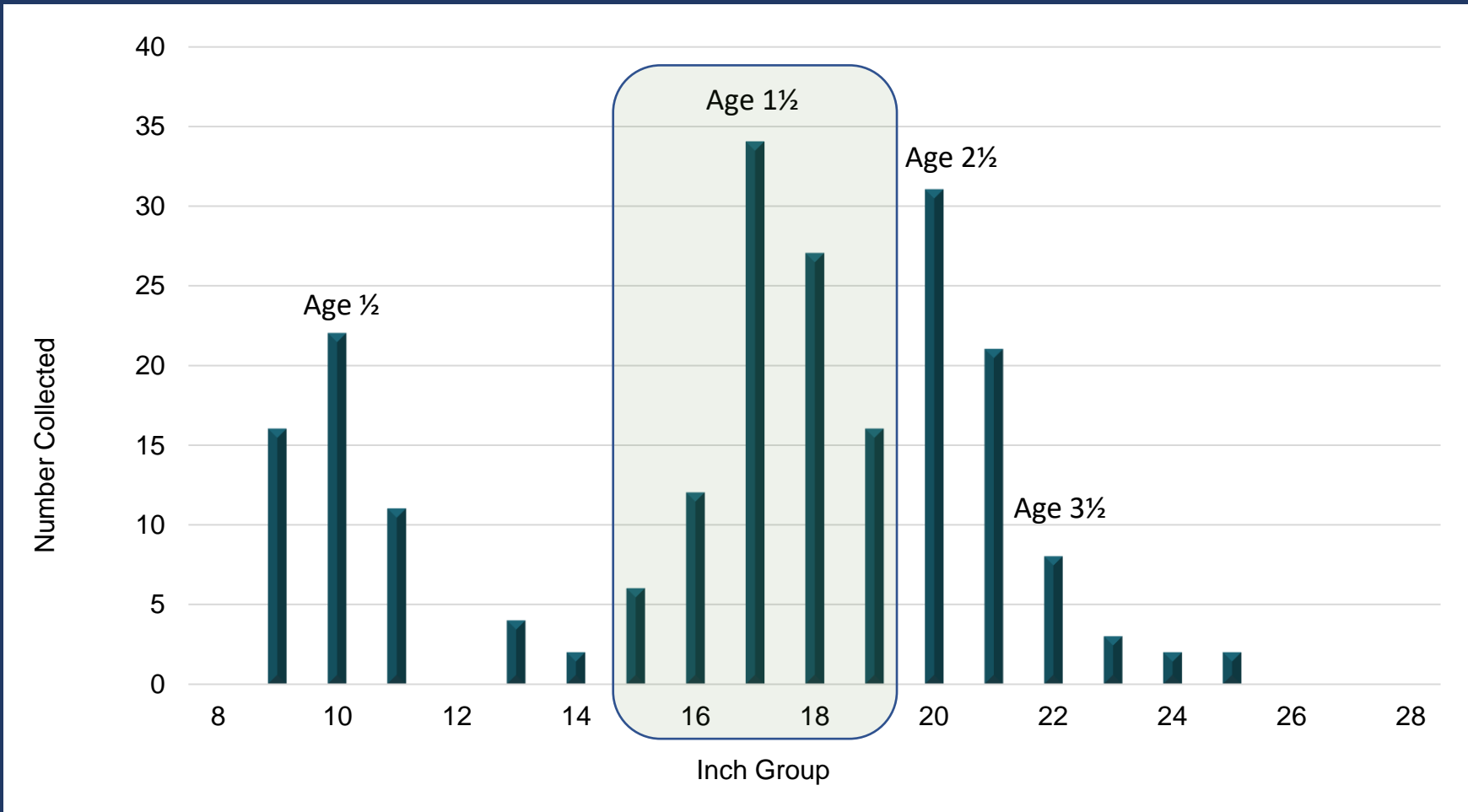


Gill Net 6-month-Old Striped Bass

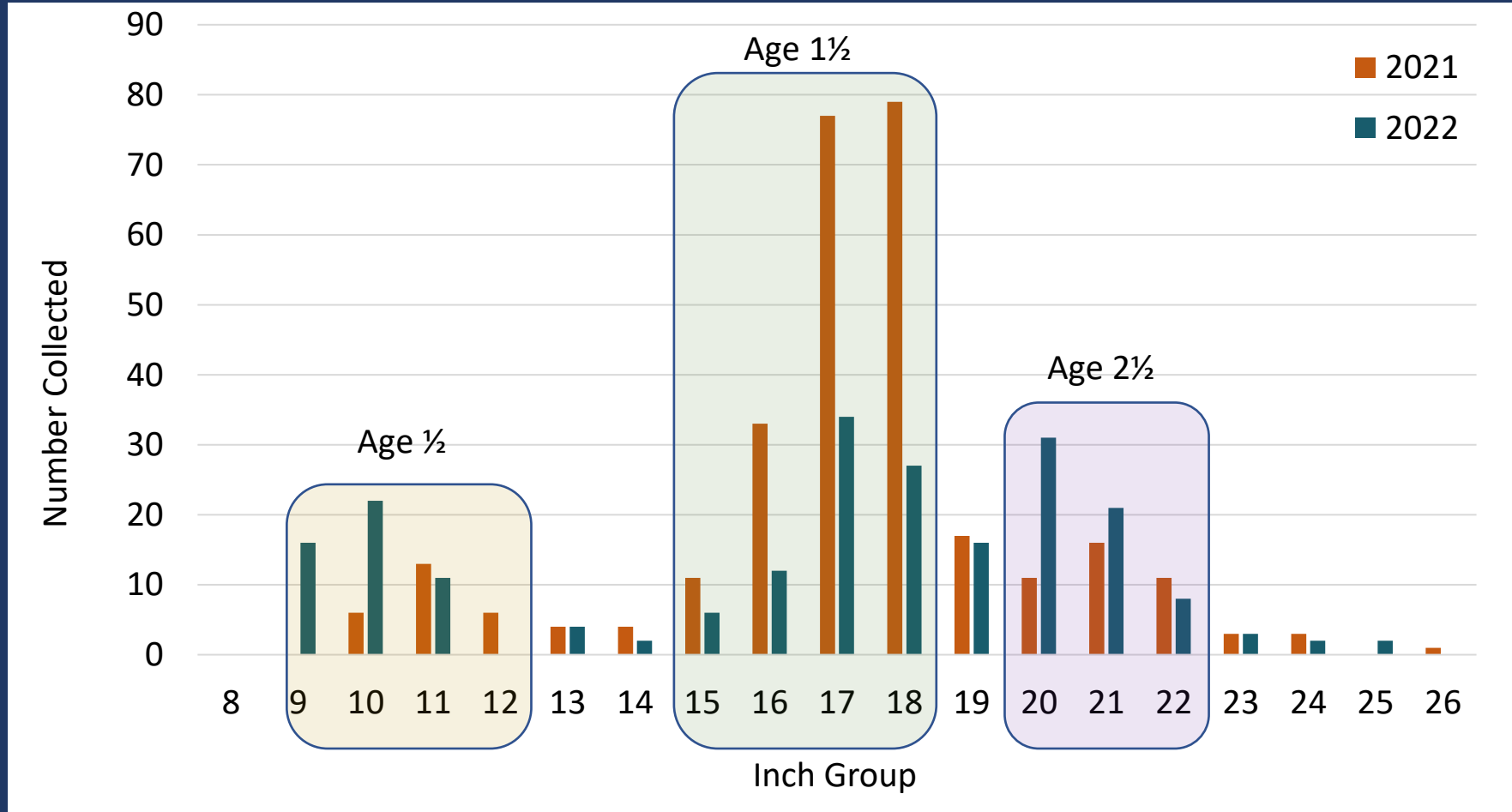
- 6 month old striped bass catch in gill nets hasn't been the best predictor of year class strength
- Except – any year that had > 2.2 fish/net produced a good year class (high #'s Ages 1 & 2)



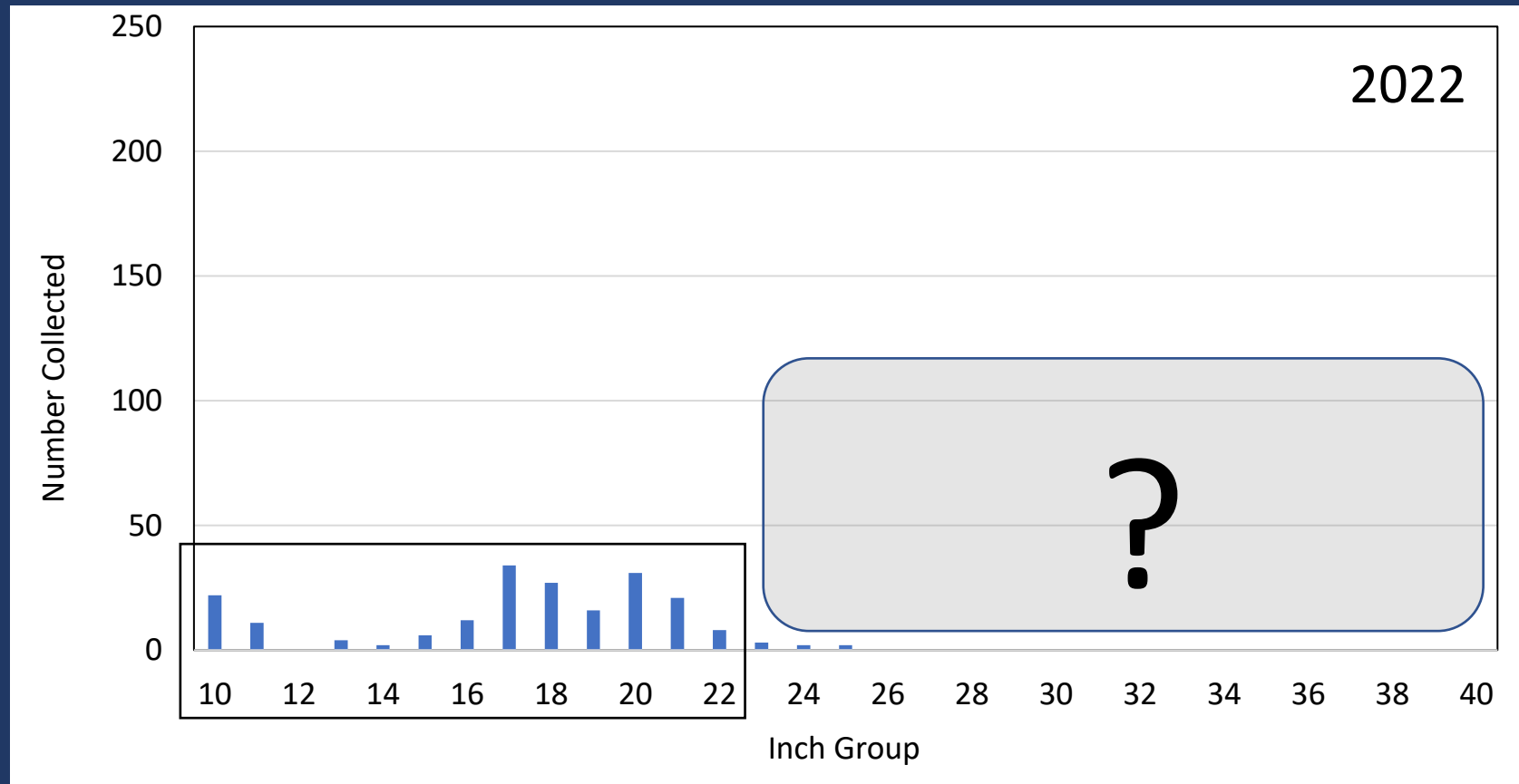
Gill Nets 2022



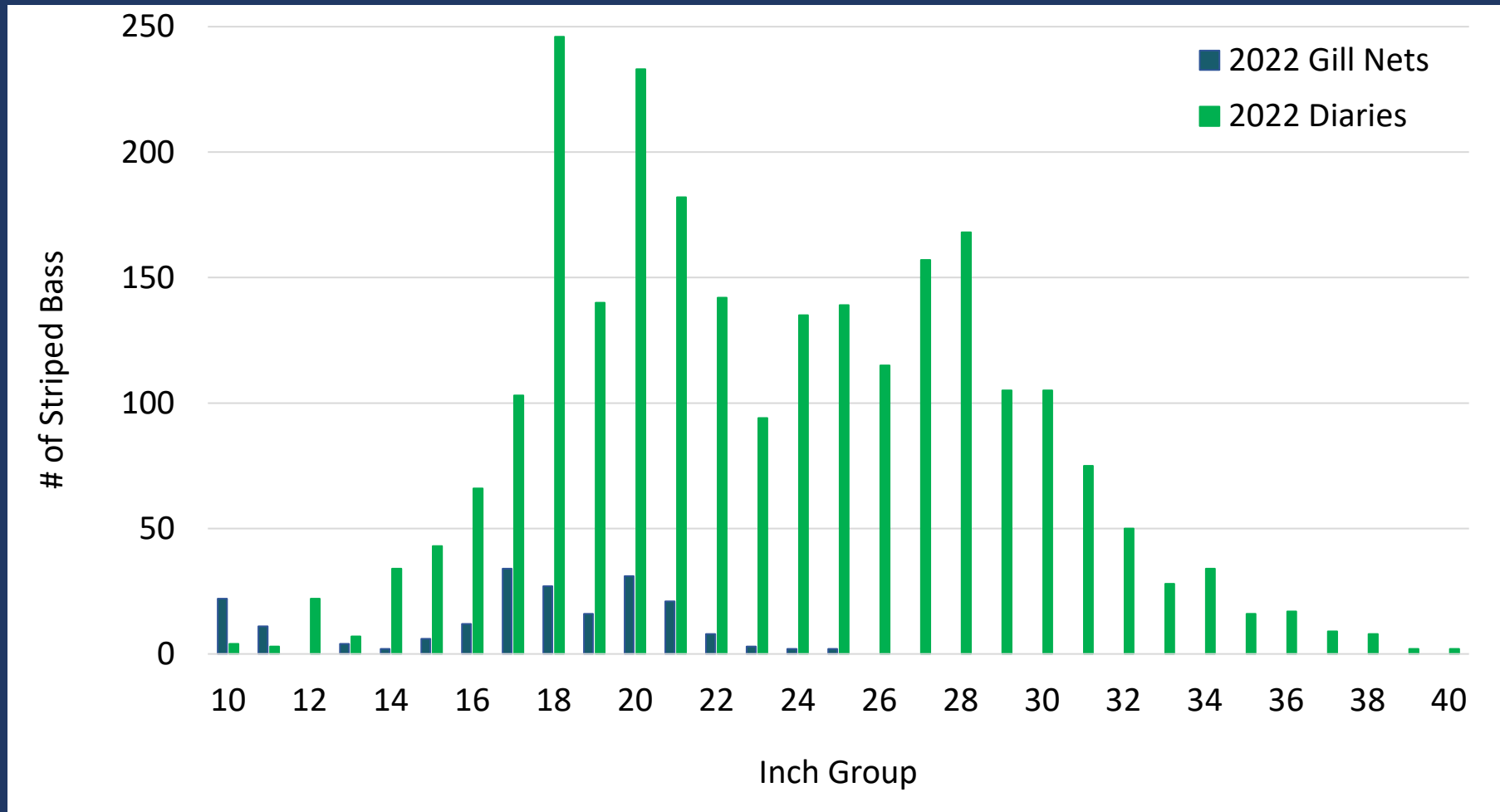
Gill Nets 2022 & 2021



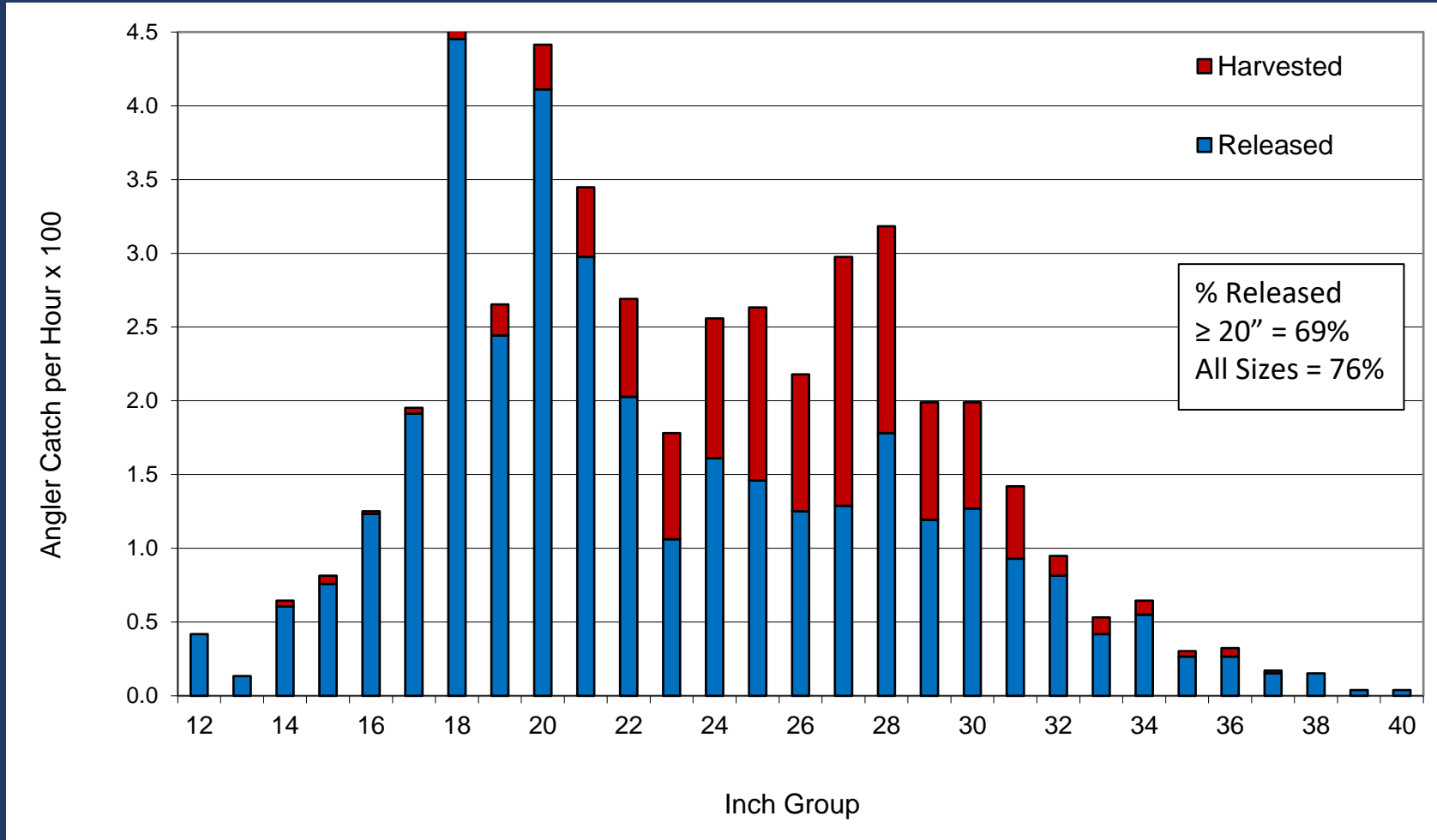
Gill Nets Do NOT Reflect the Whole Population



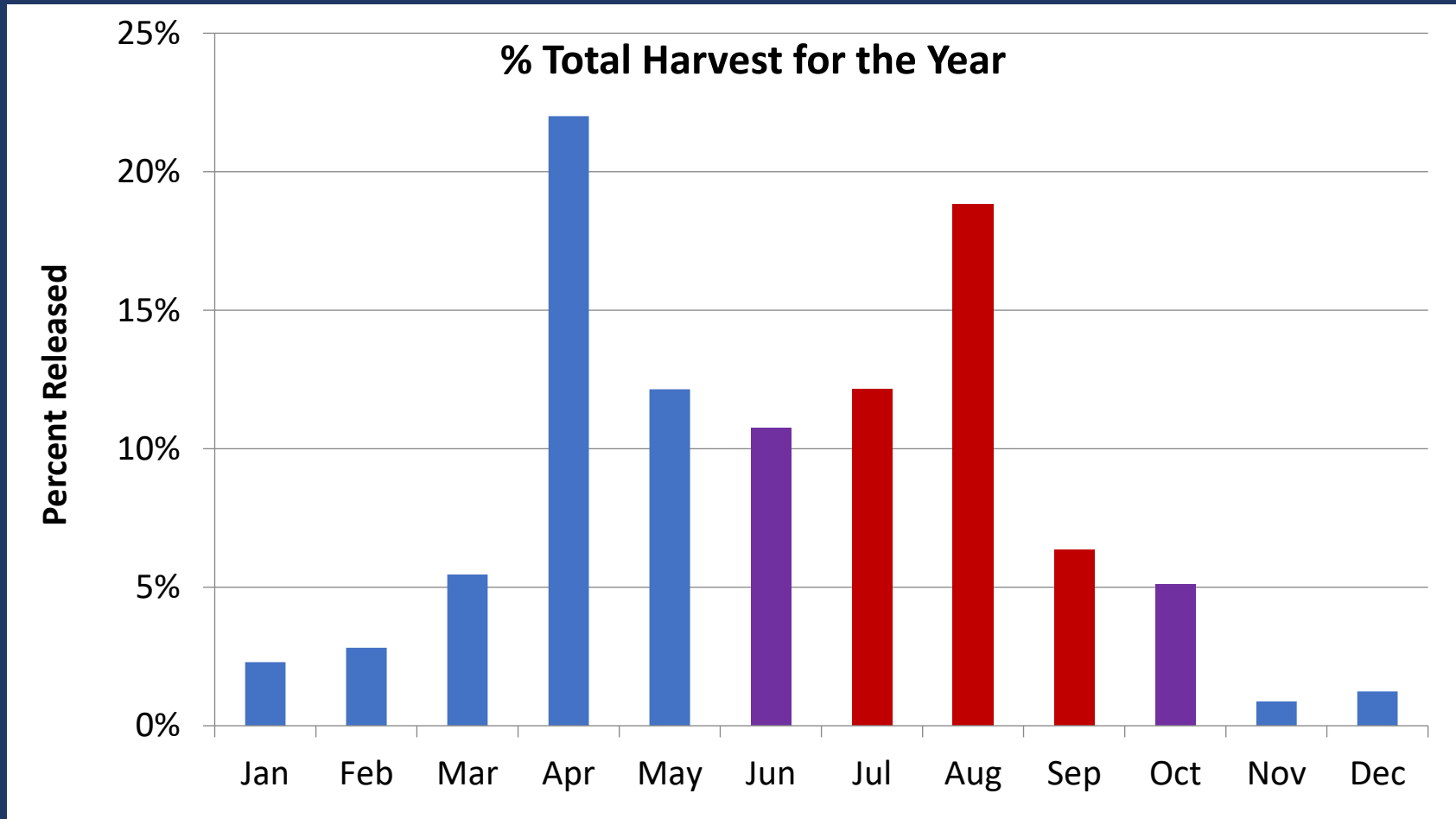
Gill Nets & Diaries - 2022



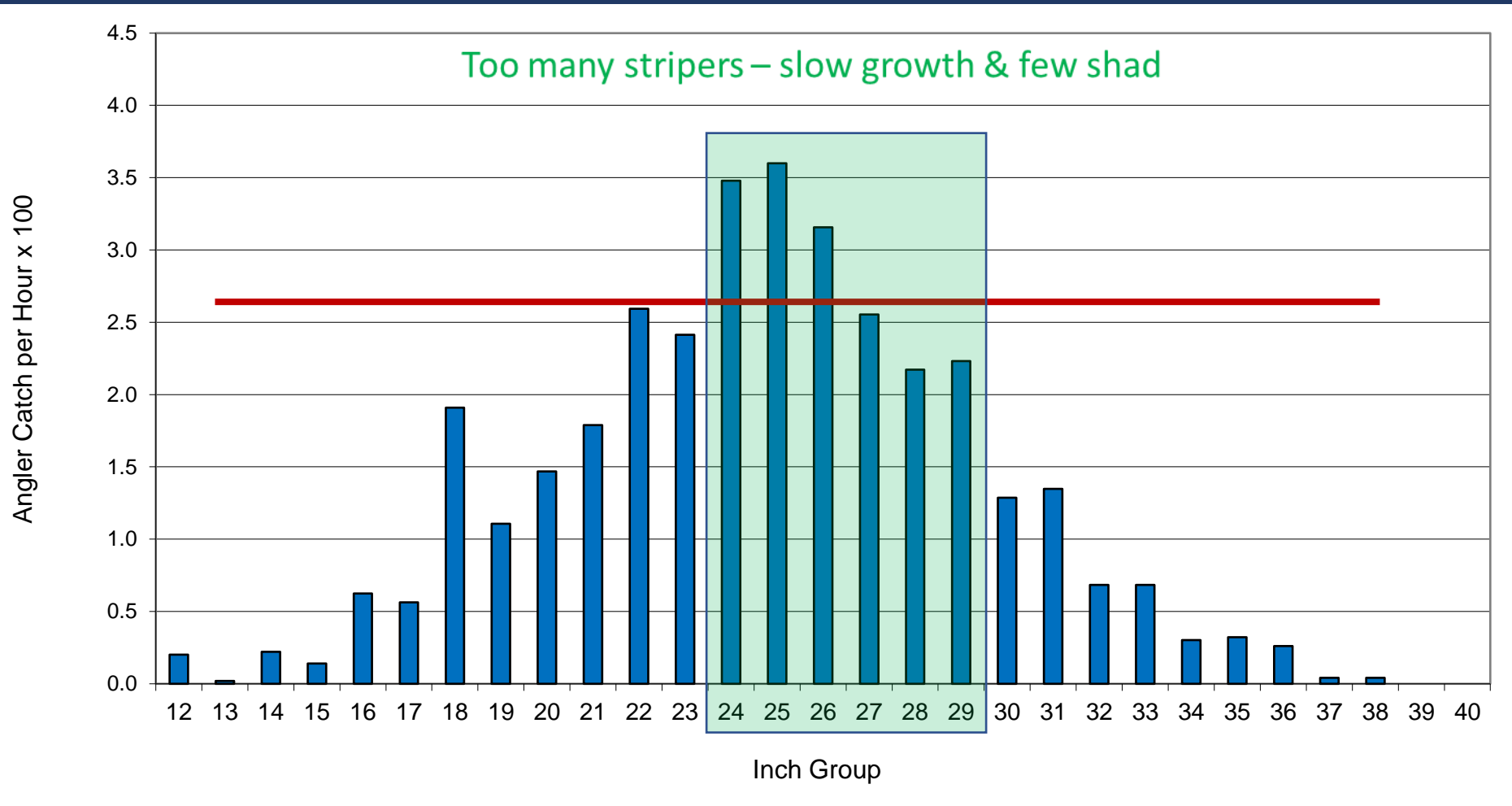
Angler Diaries 2022



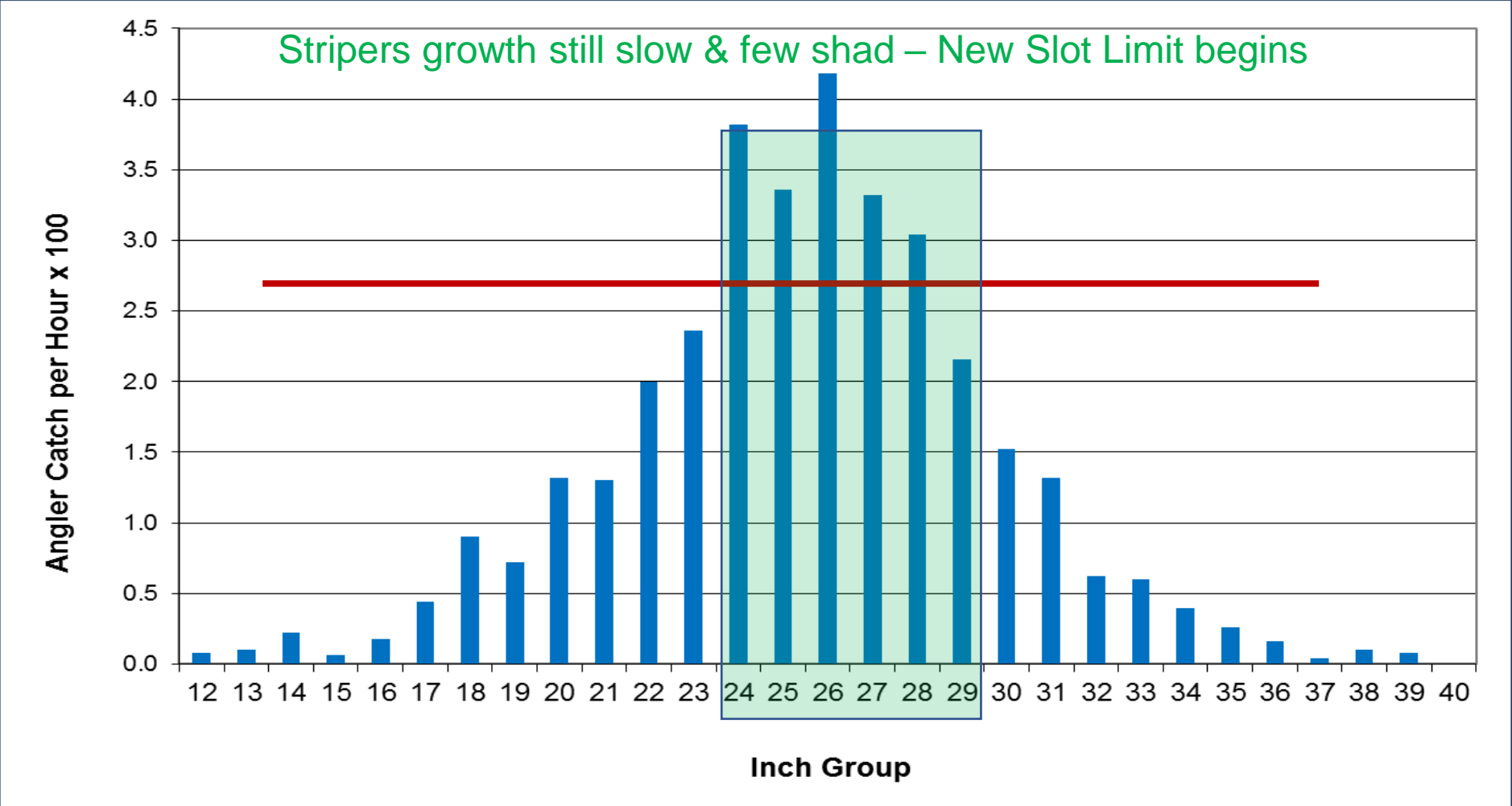
Angler Diaries 2022



Angler Diaries 2014

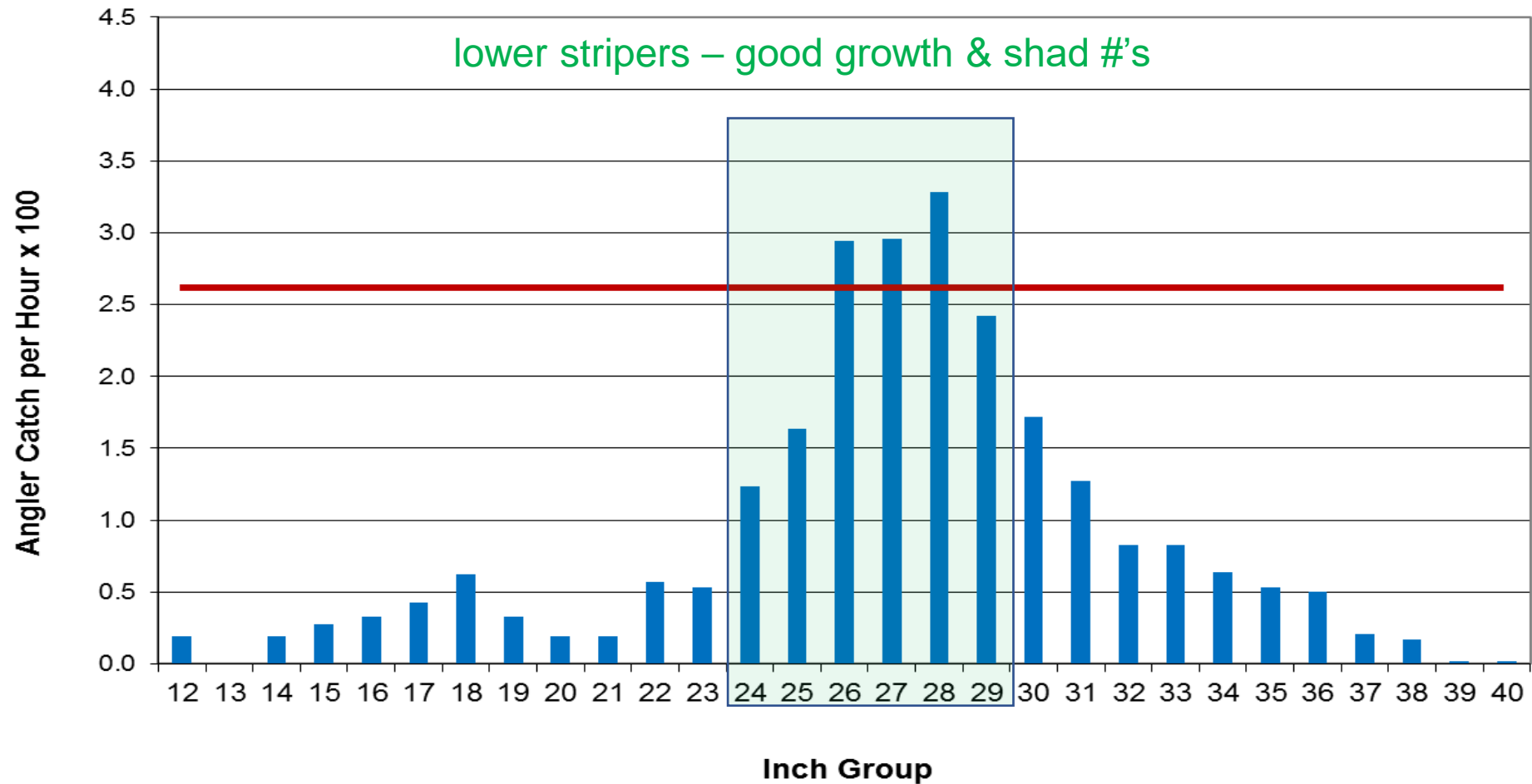


Angler Diaries 2015

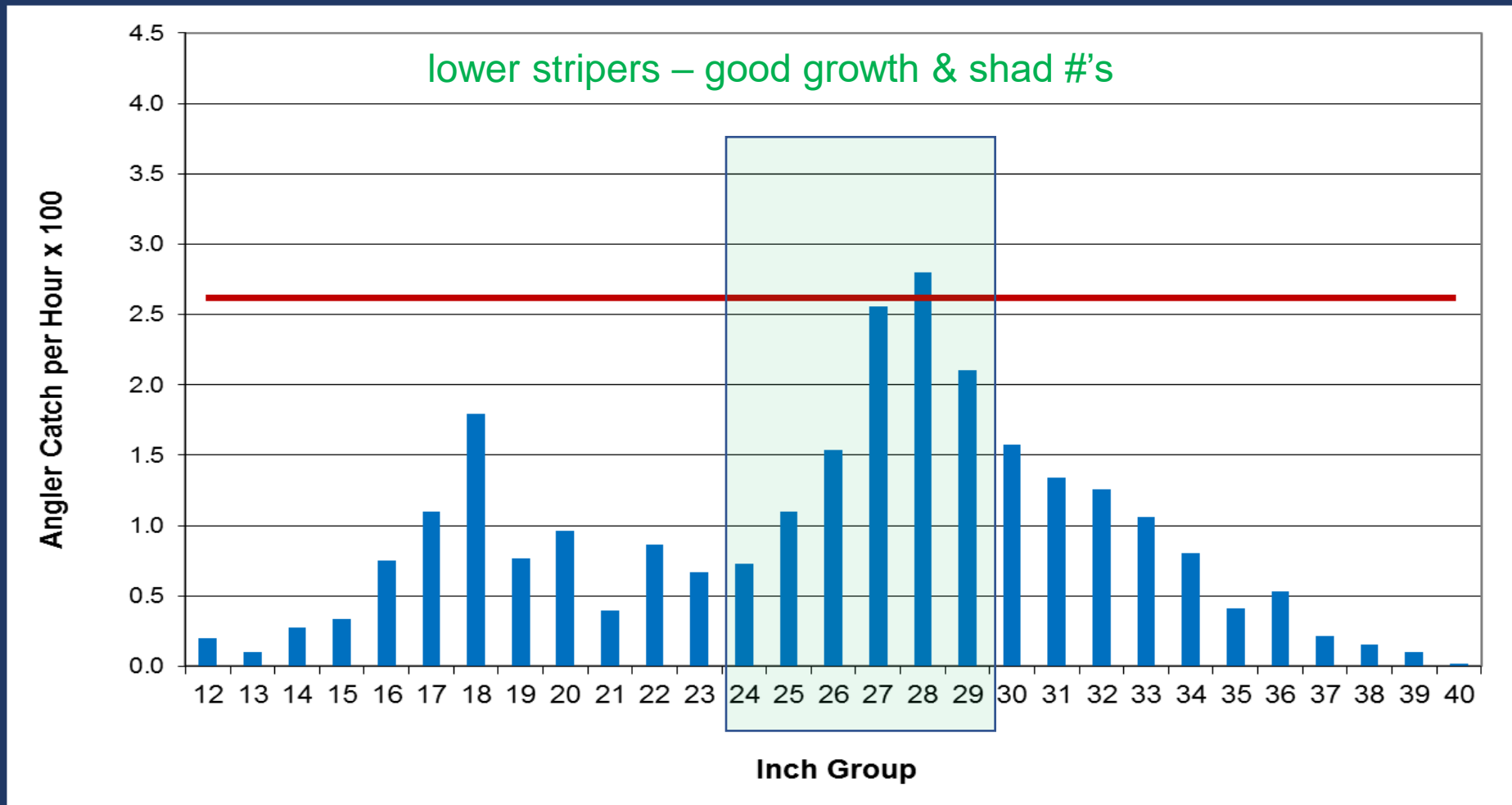


Angler Diaries 2017

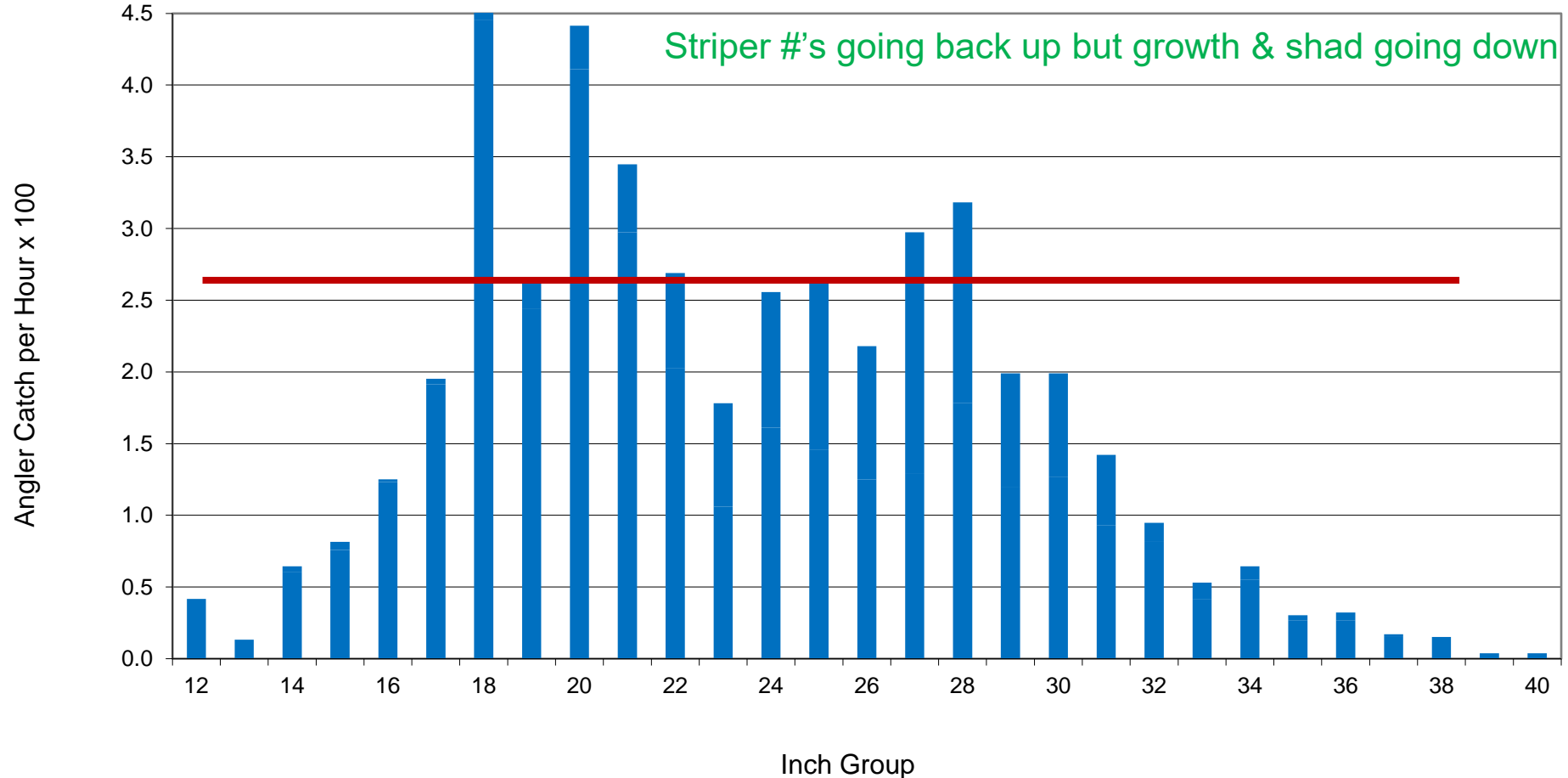
(2 years later)



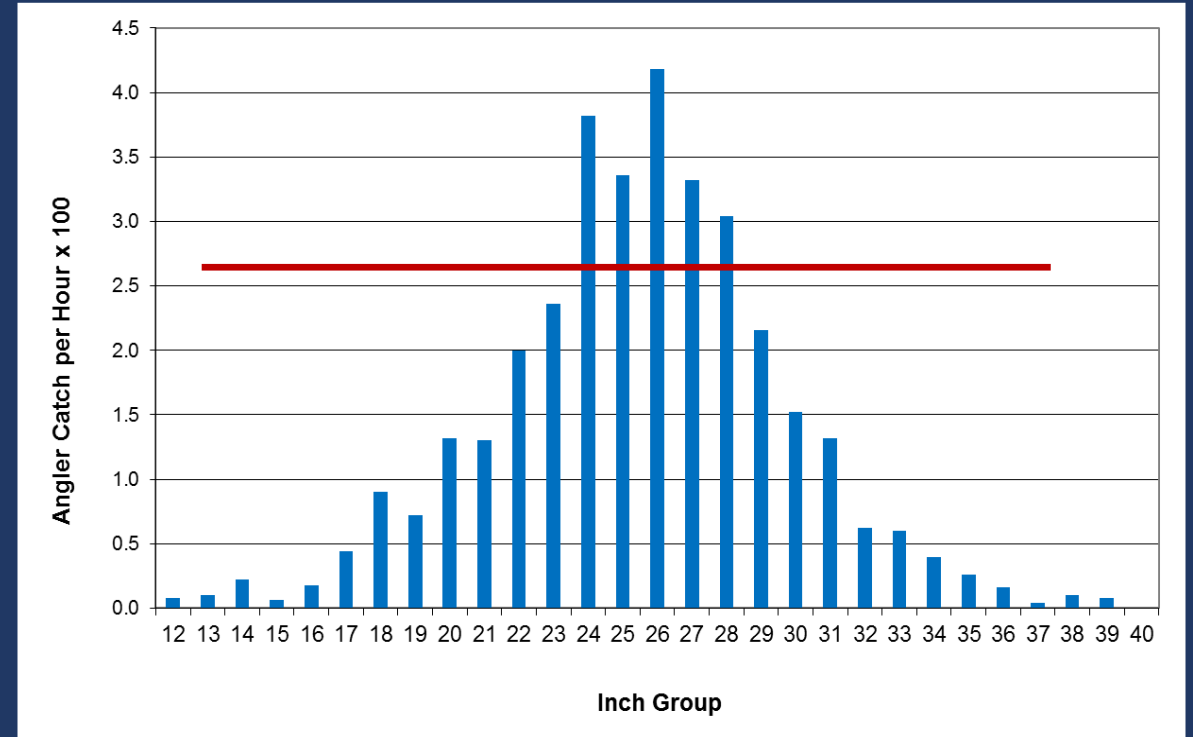
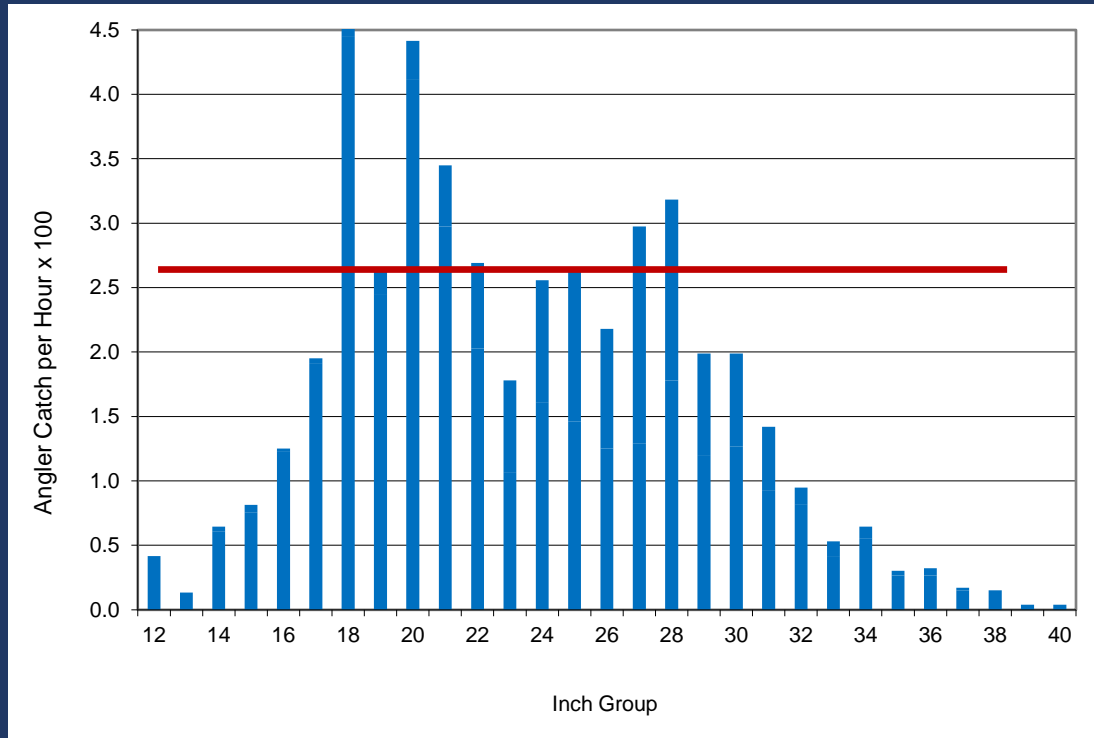
Angler Diaries 2018



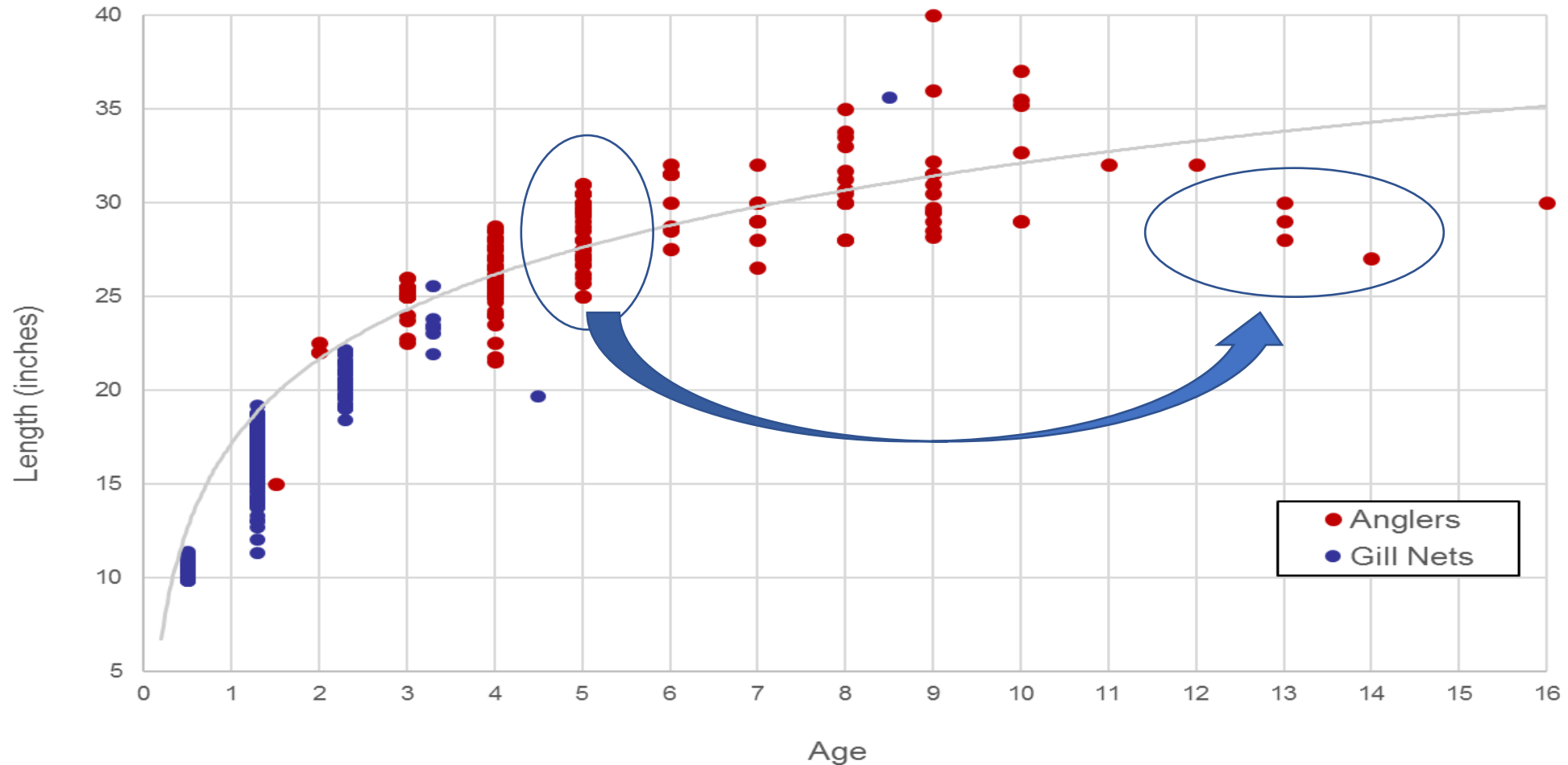
Angler Diaries 2022



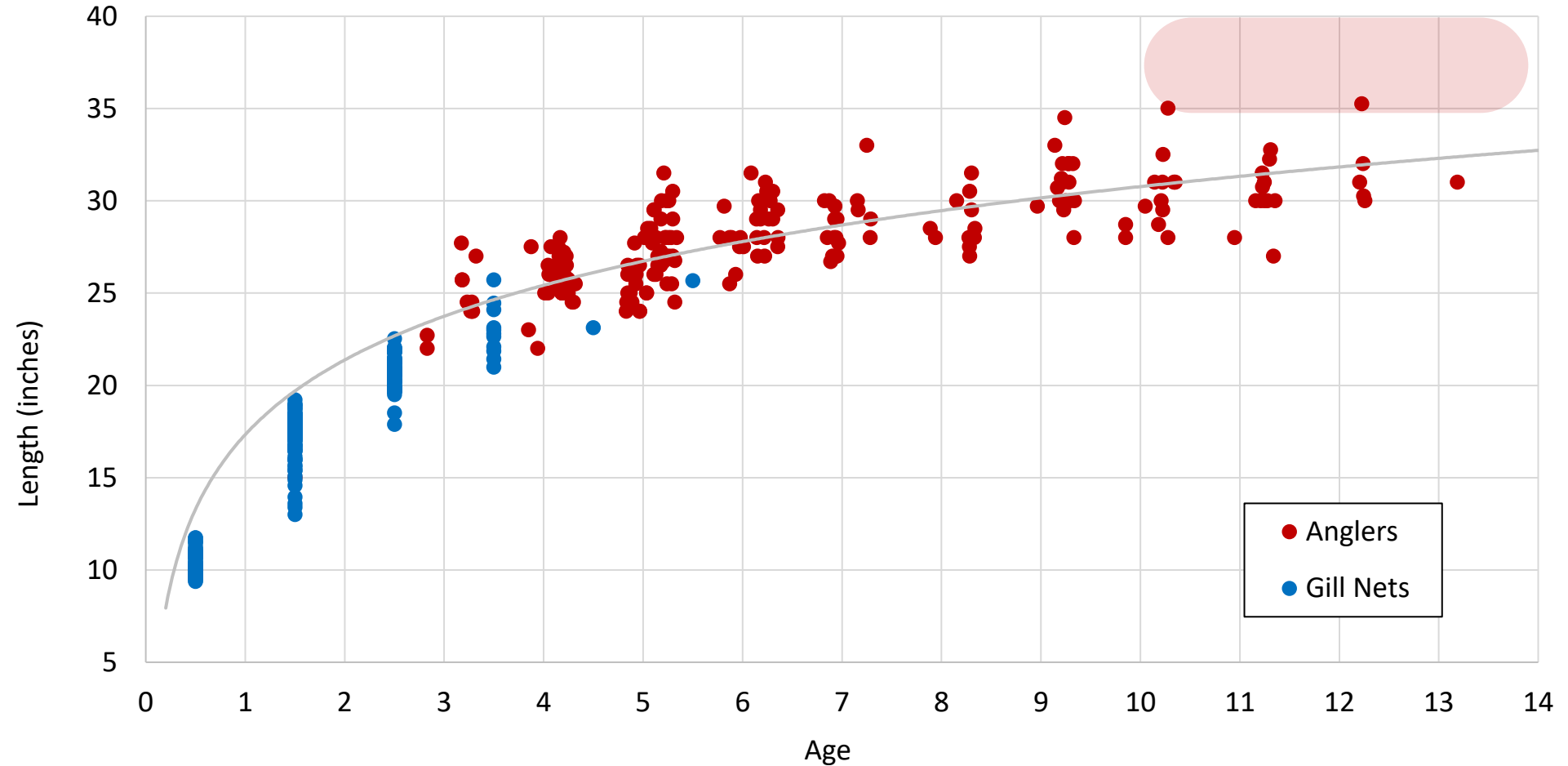
Angler Diaries 2022 & 2015



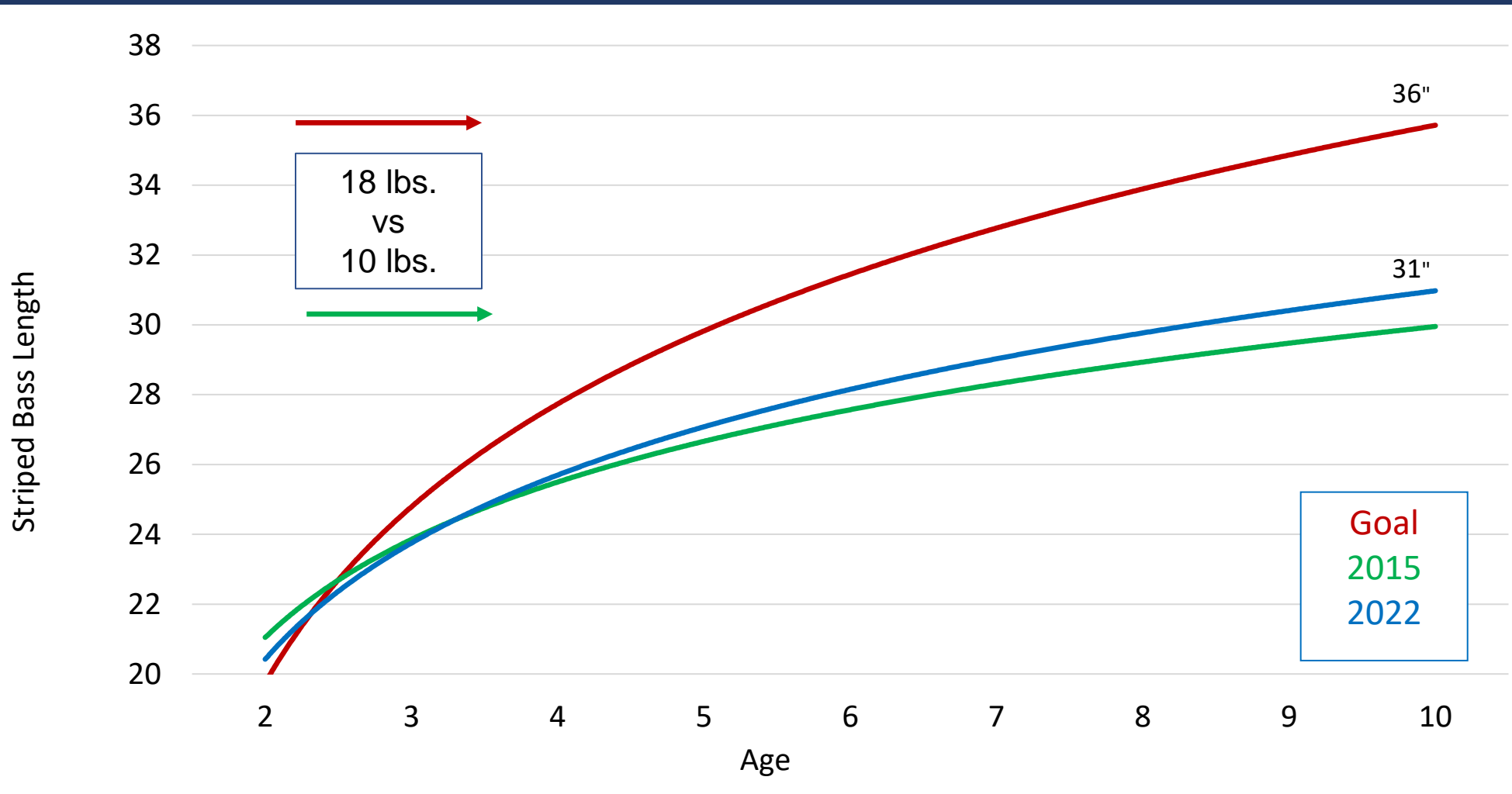
Striped Bass Growth 2021



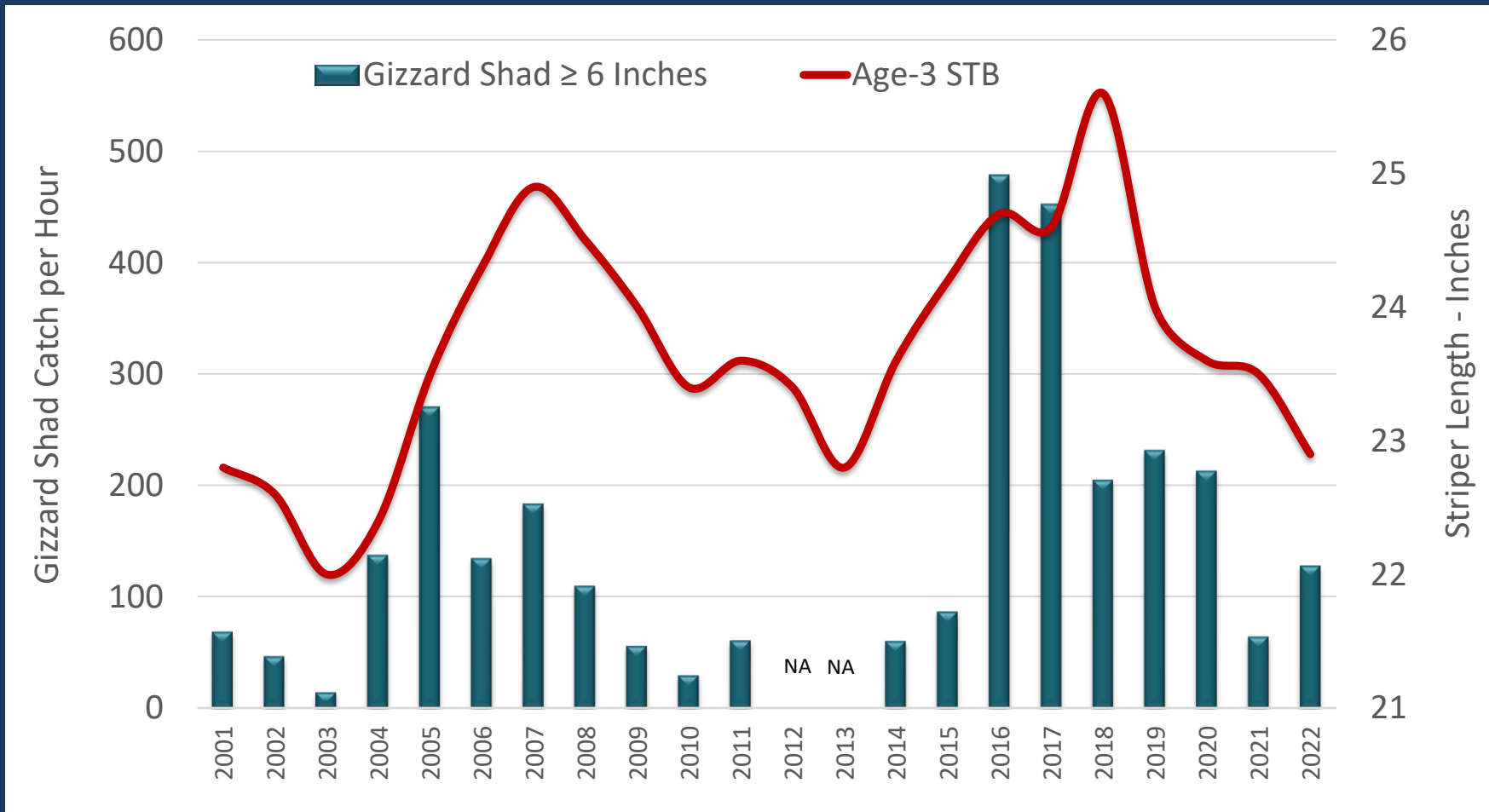
Striped Bass Growth 2022



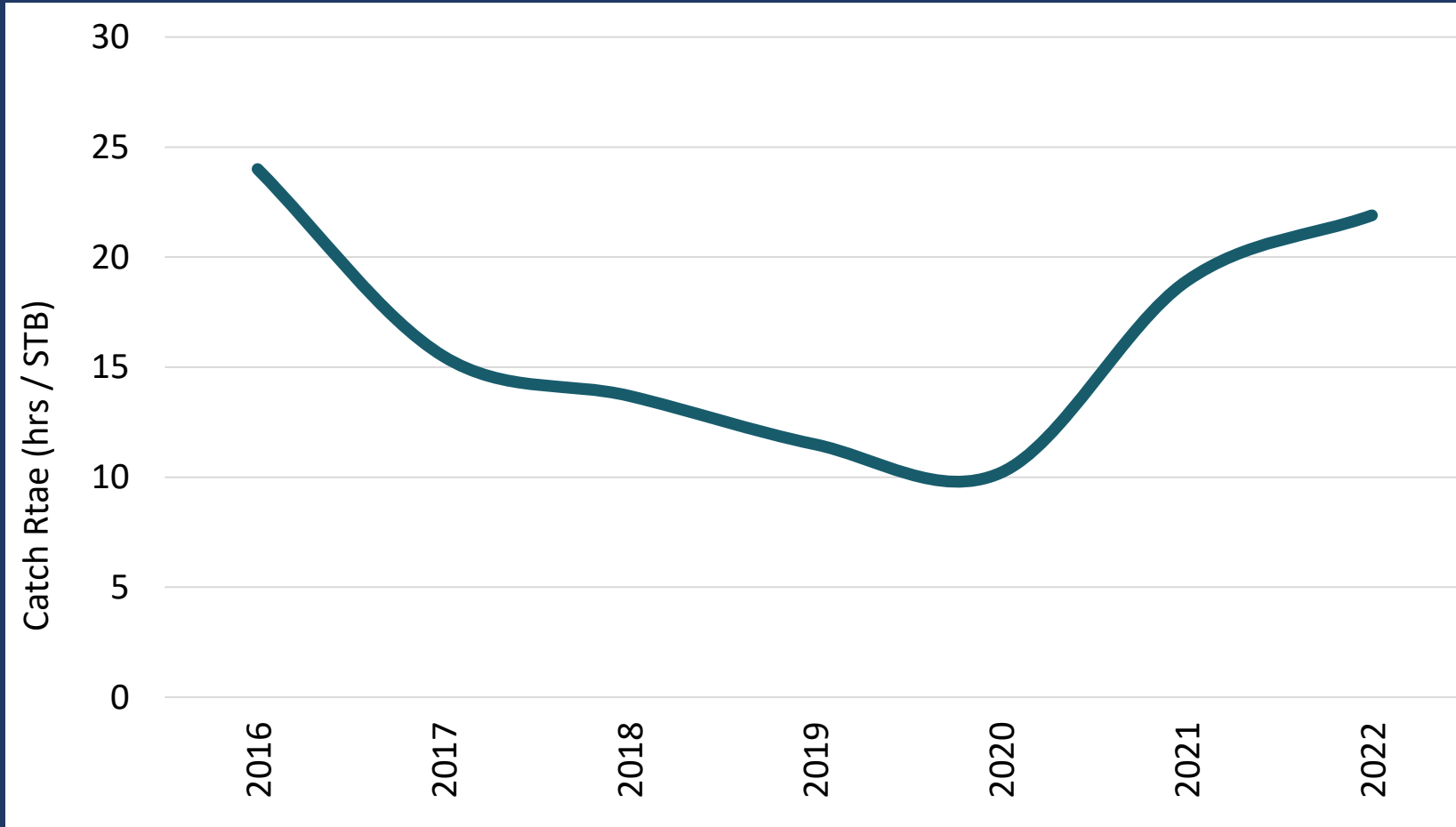
Striped Bass Growth



Shad & Striper Growth

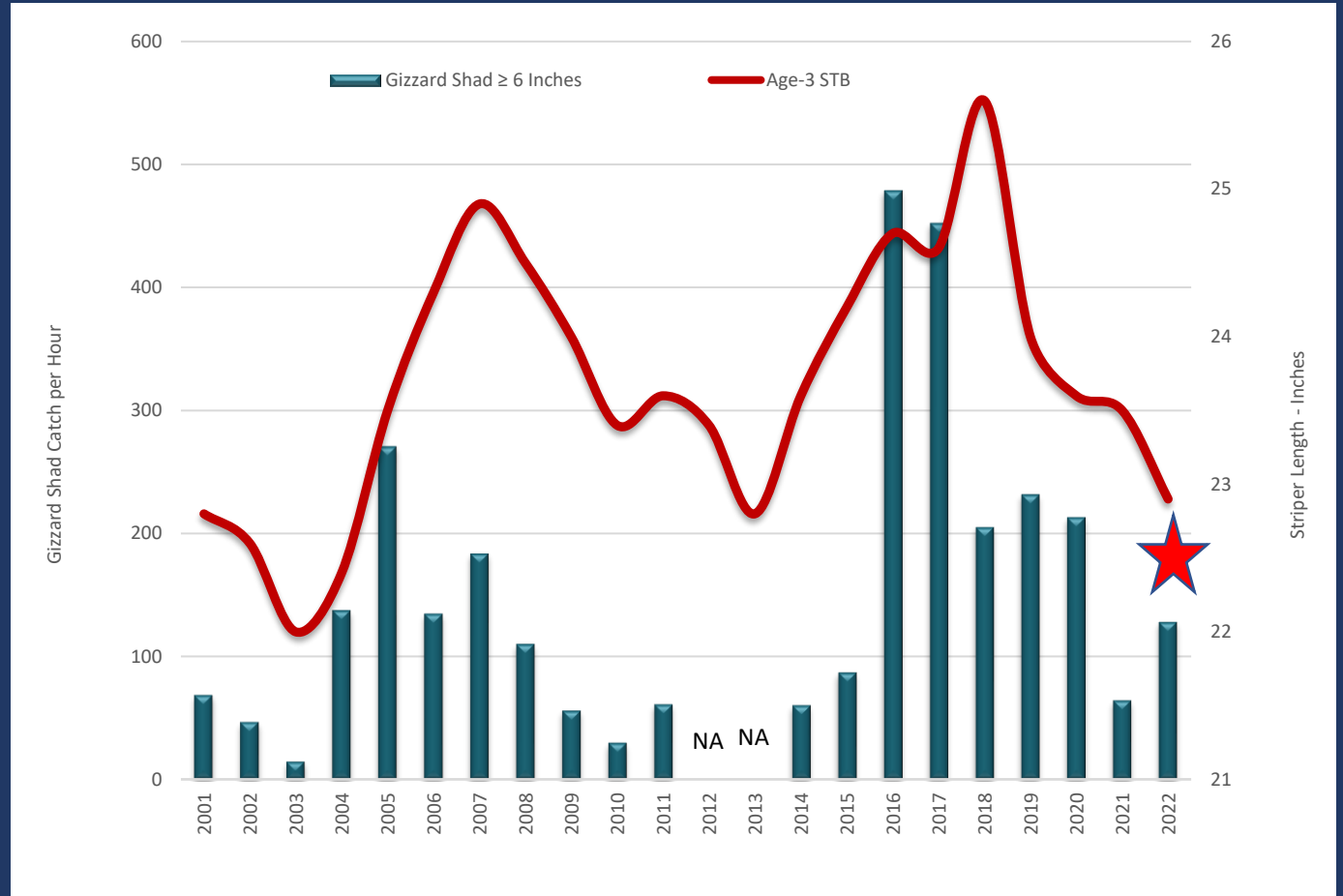


Diary Data Catch Rates $\geq 30''$

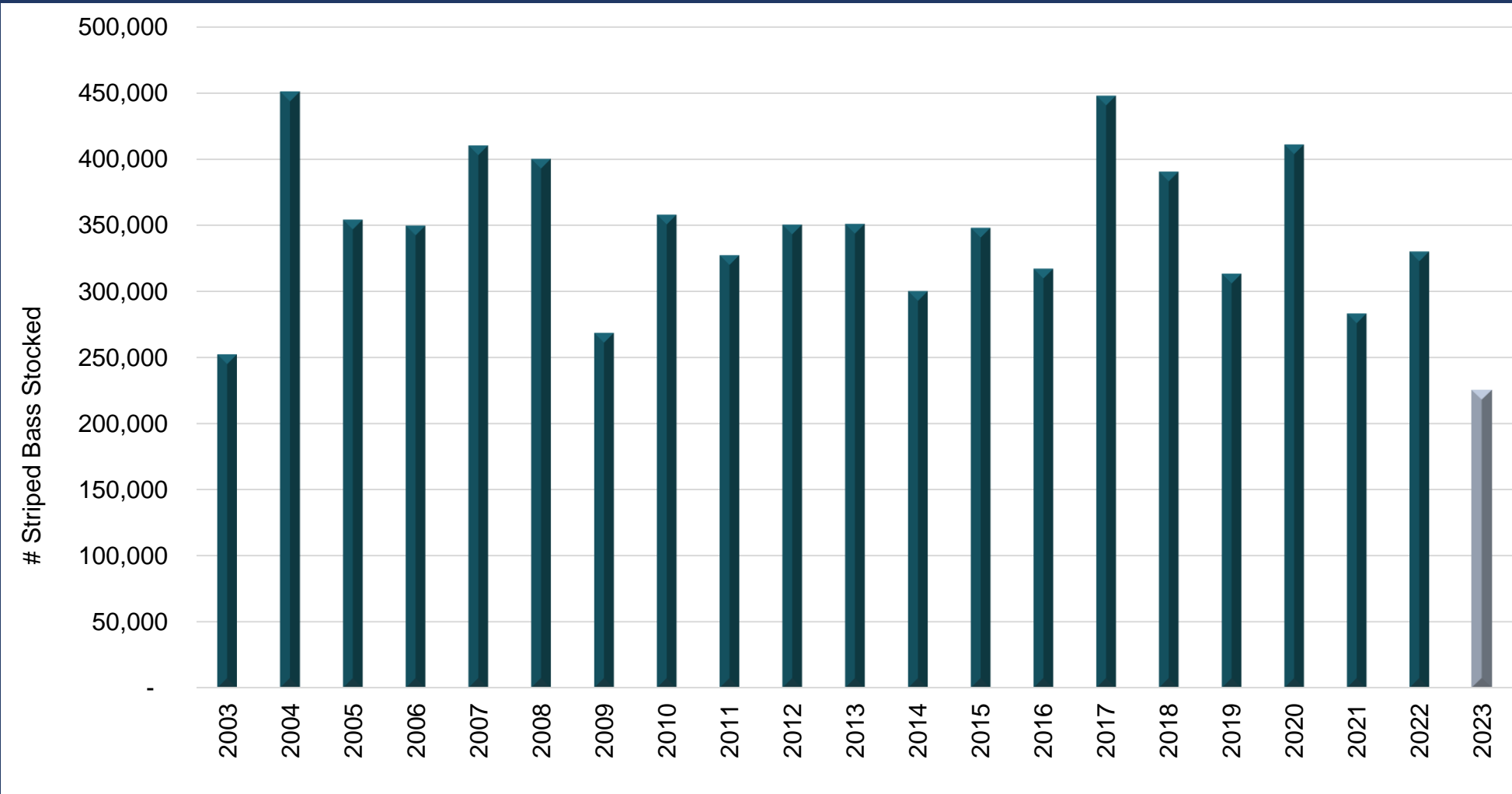


2023 Stocking \approx 225,000

- Angler Catch Rates 
- Good 2022 year class 
- Forage 
- Striped bass Growth 
- Larger Striped Bass #'s 



SML Striped Bass Stocking



Big Picture from 2022 Data

- Striped bass health and forage is lower than desired
- Number of bigger fish is lower

So

- Stocking fewer fish in 2023

But

- Fishing should be better for overall numbers the next couple of years!

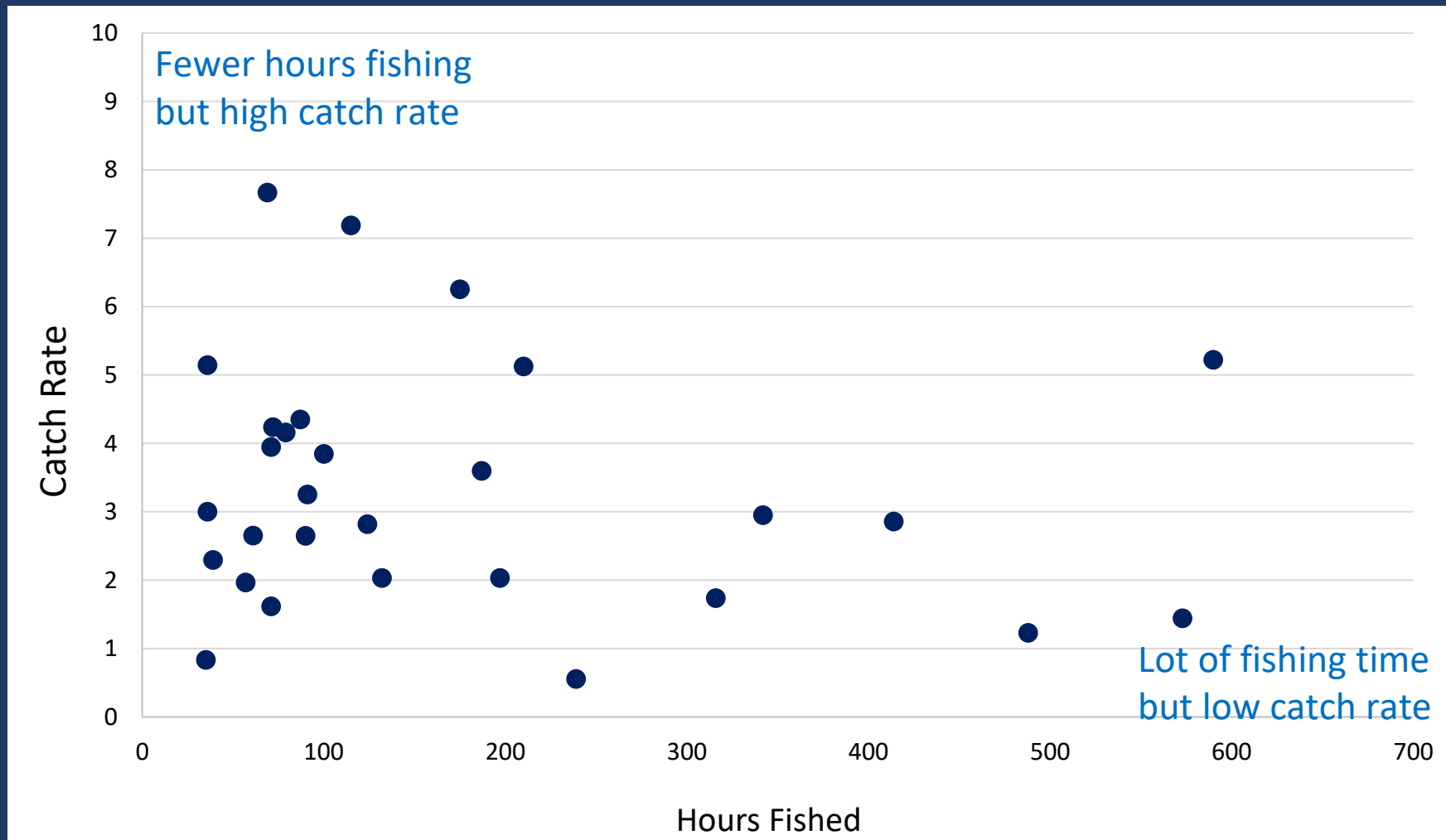
Discussion?

Random Miscellaneous Items

Diary Participation

- 2022 - most in 20 years (35)
 - 20 paper
 - 15 electronic
- Electronic participants
 - I don't know who you are (maybe you like it that way)
 - No reward

Angler Diaries 2022



Striped Bass Summer Mortality Study

(Scheduled to Start Aug. 2023)

- Previous studies in other lakes indicate low summer survival of released striped bass.
- SML has more cool water (with oxygen) available in the summer than other study lakes.
- Striped bass that are not already stressed from warm water and have cool water to return to after release, may have better survival?
- Primary Questions we are looking to answer:
 - Is summer Catch & Release mortality similar to other study lakes?
 - Do young striped bass ages 1-3 ($\approx 16''$ - $22''$) survive better?
 - Do older striped bass ($>30''$) have higher mortality?

Study Plans

- We were hoping to get a study with student/university. Due to lack of \$\$, DWR will be conducting a reduced study with existing personnel.
- Current plans are to conduct study for 2 years (August 2023 & 2024).
- This is a short-term mortality study during summer warm weather conditions.
 - Does not include longer term mortality from hooking wounds or other catch & release damage (not temperature related) that would take longer to manifest.

Study Plans

- Track striped bass with transmitters in August, hottest period.
 - Potential changes in 2024 depending on results from 2023
- Catch striped bass with hook & line by anglers.
- Insert tag into stomach
- Track for 2 days
 - Fish that die from warm conditions should die within a few hours, usually no longer than one day.

Where we are to date:

- Checked retention of tags implanted into stomach
 - 6 fish were captured by anglers on 1/10/23, tags inserted into 4 stripers, fish transported to hatchery for observation
 - Only 1 tag passed (day 4) in the 6 days held at hatchery
- Old tracking equipment acquired
- 40 acoustic tags have been ordered
- Plan to experiment with equipment later in the spring.

Primary Data collection

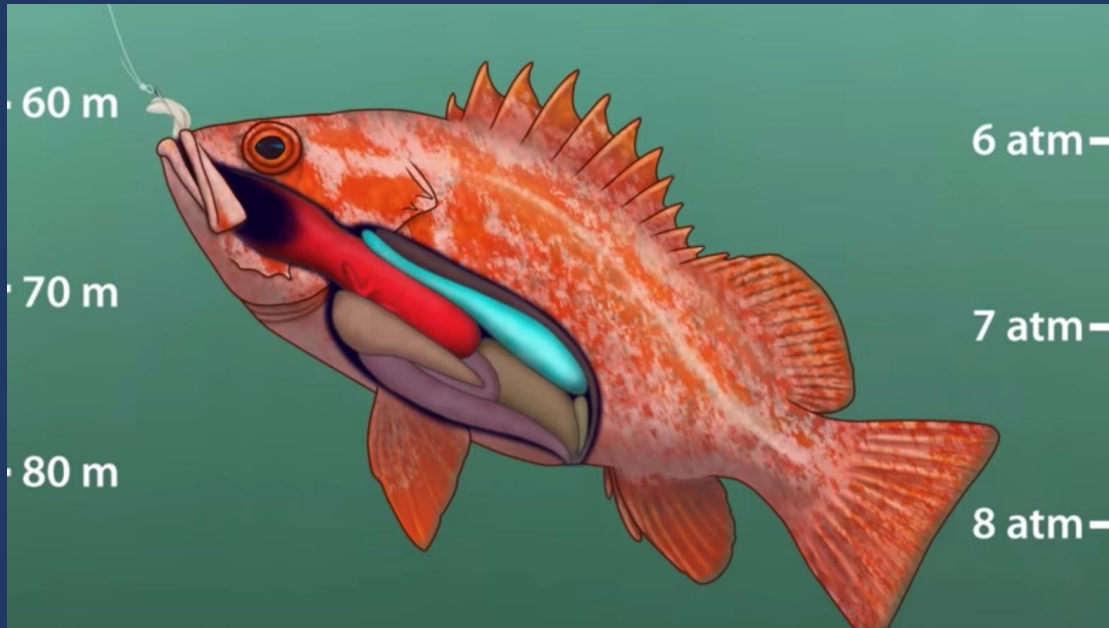
- Date
- Fish length
- Air & surface water temperatures
- Depth & temperature fish is hooked
- Water temperature profiles at capture site (temps at various depths)



Do you fish deep water and release fish?

- If yes – have you ever had fish that can not get off the surface?
- If you fish in deep water and release fish, you should have a descending device in your boat. It can be a simple home-made devise with hook/line/weight (YouTube for instructions), or you can purchase one.

Descending Device



Barotrauma

1 **HOMEMADE INVERTED HOOK DESCENDING DEVICE**
Use only when fish shows signs of barotrauma

Bend heavy gauge wire on one side
Bend wire to make tight loop
Cut wire to make a sharp point
1-3 lb. weight

2 Use enough line to reach captured depth
Insert hook through hole made by circle hook or gently pierce through lower lip

3 Lower rig into water while letting out line

4 Jig line to release fish once captured depth is reached

Fish art by Diana Rome Peebles
MyFWC.com/Barotrauma



Striped Bass Heads for Growth Data

- Provided DWR paper forms are water resistant
- Normal paper will fall apart, information often not discernable/lost
- If using other paper, place in ziplock bag
- Place in mouth of the striped bass head

Name: _____

Email: _____

or

Address: _____

City _____ State _____ Zip _____

Phone Number (_____) _____ - _____

*Length: _____ Weight (if available): _____

*Date Caught: _____ / _____ / _____

*Required information

Place this paper in mouth of striper

Angler Survey 2023

- DWR will be conducting an angler survey (creel survey) at SML starting mid-March.
- They are conducted about every 5 years
 - Its' been 9 years since last one due to COVID
- Interviews conducted from a boat while people are fishing.
- Important data collected about what people catch and what they fish for.
- Results help justify management on the lake including striped bass stocking.

What anglers fished for at Smith Mountain Lake, Marc-October, 2014.

Striped Bass	39%
Black Bass	52%
Catfish	2%
Crappie	3%

Expenditure estimates by angler type during the Smith Mountain Lake creel survey, March–October 2014.

Striped Bass	\$2,523,000
Black Bass	\$2,997,000
Catfish	\$123,500
Crappie	\$94,500



2012



2021



2022

Questions?

