



Department
of Health

New York State Department of Health

Hudson River Fish Advisory Outreach

A detailed illustration of a striped bass fish, shown in profile facing left. The fish has a greenish-blue upper body with dark horizontal stripes and a lighter, silvery lower body. It is positioned above a dark teal wavy line representing water.

Can you eat that fish from the Hudson River? www.health.ny.gov/fish

A small logo for the New York State Department of Health, featuring the words "NEW YORK" in a bold font above "state department of" in a smaller font, and "HEALTH" in a bold font below, all within a dark rectangular border.

NYS DOH Hudson River Fish Advisory Outreach Program Update

Hudson River PCBs Superfund CAG, June 3, 2021

Agenda

- About the program
- What is the advice
- Key Program Deliverables:
 - Free materials and key outreach tools
 - Hudson River fish advisory sign program
 - Outreach to newcomers
 - Consumption surveys and what we've learned
 - Special outreach to striped bass anglers



About the Program

Hudson River Fish Advisory Outreach Project

- Goal: Everyone eating Hudson River fish knows, understands and follows the New York State Department of Health (NYS DOH) advice on fish consumption for 192 miles from Hudson Falls to NYC
 - Commitment of 20 years through 2027
 - Focus on community partnerships
-





Hudson River Fish Advisory Outreach Project Activities



Identify and support partners who can develop and administer fish advisory outreach programs



Work with property owners to get signs posted at major fishing access sites



Evaluate outreach efforts to determine which ones are working and what barriers exist



Incorporate emerging health education methods into outreach efforts



Implement culturally appropriate strategies to encourage people to follow the advisories

NYS DOH Outreach

NYS DOH staff do presentations and table at a range of events – 20-40 field days each year (many more when partners factored in)

- County fairs & community festivals
- Fishing and hunting shows
- Fishing & boating organizations
- Faith-based and neighborhood associations
- Food pantries
- ENL and GED classes

Staff attend events in all 13 counties.

Outreach key in Capital District where fish are more contaminated and can legally be kept (vs. upstream of Federal Dam -catch and release only).



Partners

- Have issued two Requests for Applications for \$15,000 a year, per partner, since 2009
- 2009 to 2013 –subcontracts awarded to four community partners (\$60,000 total annually)
- 2014 to 2019 + 2 year extension (2021) - subcontracts awarded to six community partners (\$90,000 total annually)



Current Funded Partners

Six funded partners:

- Cornell Cooperative Extension (CCE) Albany
- CCE Dutchess
- CCE Rockland
- CCE Saratoga
- Rensselaer Land Trust
- Hudson Sloop Clearwater

Activities include:

- Tabling at events
- Presentations in community venues
- Classes at schools
- Informal surveys on Hudson River fish consumption
- Promoting advice via radio, newspapers, and social media
- 2020/21 - COVID adaptations



NYS DOH Hudson River Fish Advisory Outreach

Hudson River Fish Consumption Advice

What Is the Advice?

- Women under 50 (childbearing years) and children under 15 should not eat any Hudson River fish or crabs between Hudson Falls and the New York City Battery
 - Chemicals (PCBs) may have a greater effect on the development of young children or unborn babies. Also, some chemicals may be passed on in mother's milk.
- For men over 15 and women over 50 the advice depends upon
 - who you are
 - where you fish
 - what you catch
- In addition to anglers, a focus on reaching young women and families

WARNING!

Fish and crabs from these waters contain chemicals and may be harmful to eat, especially for women and children.

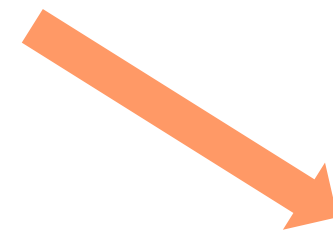
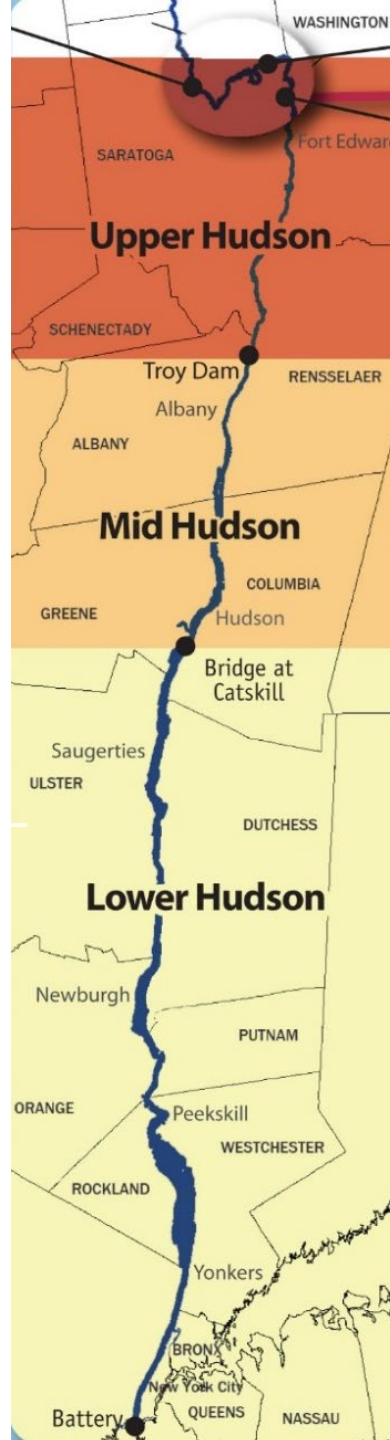


Learn more! Call NYS Department of Health
518-402-7800
800-458-1158

Hudson River
Advice for Men
over 15 and
Women over 50:

Hudson Falls to
Troy

Troy to Catskill



Upper Hudson

From the Rt. 9 Bridge to Troy Dam

Do not eat fish from the Route 9 Bridge to the Troy Dam.

From Baker's Falls to the Troy Dam, New York's State Department of Environmental Conservation's "catch and release" regulations apply.

Take No Fish. Eat No Fish.

Mid Hudson

From Troy Dam to Bridge at Catskill

Eat up to one meal a month:



Alewife



Rock bass





















Blueback herring



Yellow perch

Do not eat other fish from the Mid Hudson including striped bass

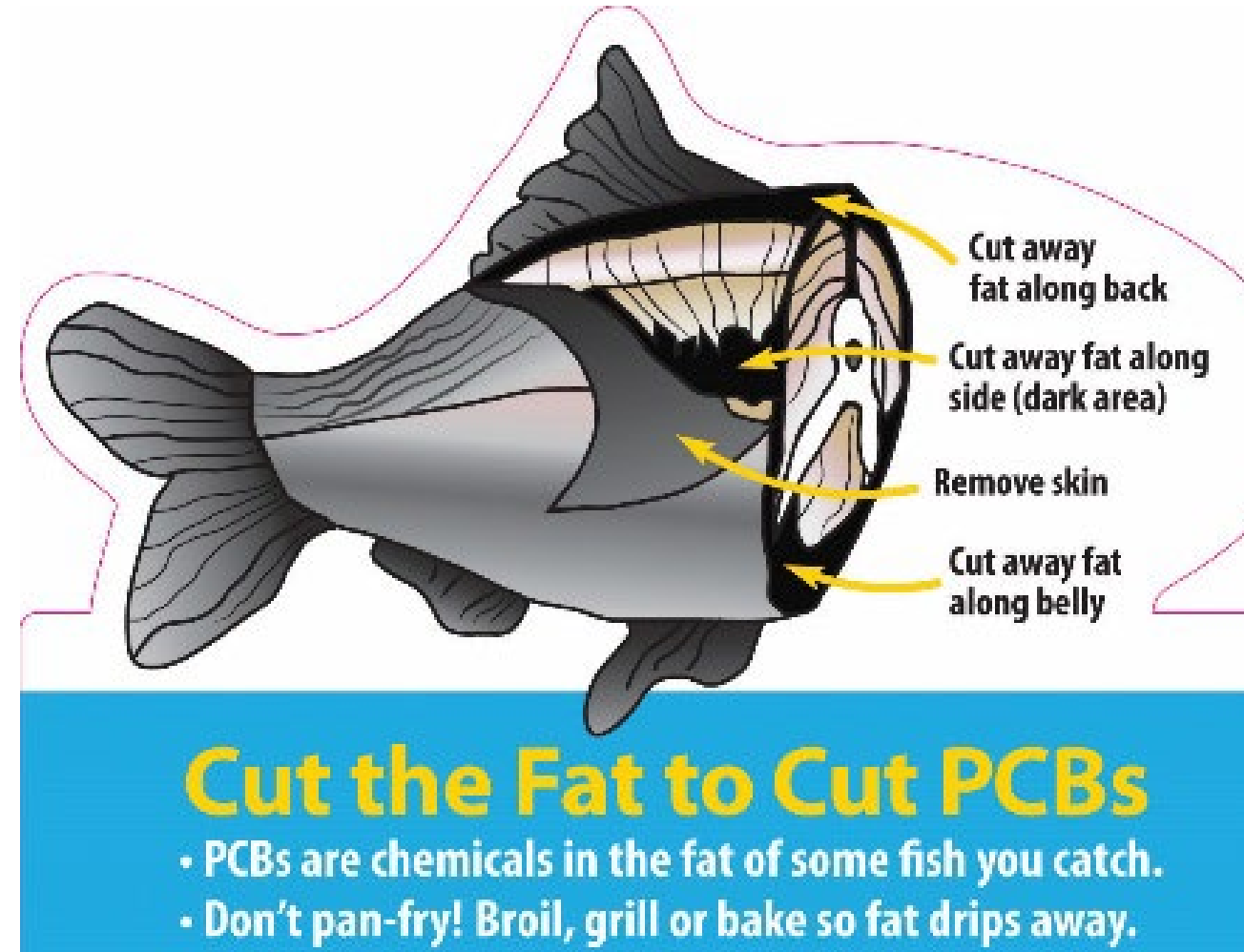
Hudson River Advice for Men over 15 and Women over 50: Catskill to NYC

<p>Lower Hudson From Rip Van Winkle Bridge at Catskill to the NYC Battery</p>	 Men over 15 and Women over 50	 Women under 50 and Children under 15
 Walleye  White catfish  Channel catfish  American eel*  Gizzard shad <i>*DEC regulations prohibit taking American eel for food from the Hudson River</i>	DON'T EAT	DON'T EAT
 Striped bass  Smallmouth bass  Largemouth bass  Bluefish  Brown bullhead  White perch  Carp  Rainbow smelt  Goldfish  Atlantic needlefish	Up to 1 meal/month	DON'T EAT
 Blue crab Do not eat the tomalley (green stuff, mustard) or reuse cooking water	Up to 6 crabs/week	DON'T EAT
All other species	Up to 4 meals/month	DON'T EAT

PCBs and Dioxin Build Up in the Skin and Fat of Fish

People who eat Hudson River fish can reduce chemicals in a fish meal by:

- Removing the skin and fat and cooking so fat drips off
 - can remove about half of the PCBs in a fish meal
- This advice is problematic for many ethnic groups as they prefer to use the whole fish
- Avoiding eating fish with high levels of PCBs like catfish and walleye



Reducing Chemicals in a Crab Meal

- PCBs, dioxin and cadmium build up in the crab mustard/tomalley (don't eat)
- 80% of the PCBs move into the cooking water - discard cooking juices and don't use to make sauces or soups
- Very popular – people who catch them, eat them
- Women under 50 and children under 15 shouldn't eat any crabs from the Hudson River
- Crab mustard/tomalley consumption is common for a number of ethnic groups

New York State Blue Crab Cooking & Eating Guide



Signs, Free Materials, and Key Outreach Tools

WARNING!

Fish and crabs from these waters contain chemicals and may be harmful to eat, especially for women and children.



Learn more!

Call NYS Department of Health
518-402-7800
800-458-1158

NOTICE!

Some fish and crabs from these waters may be harmful to eat.



Learn more!

Call NYS Department of Health
518-402-7800
800-458-1158

Hudson River Fish Advisory Signs

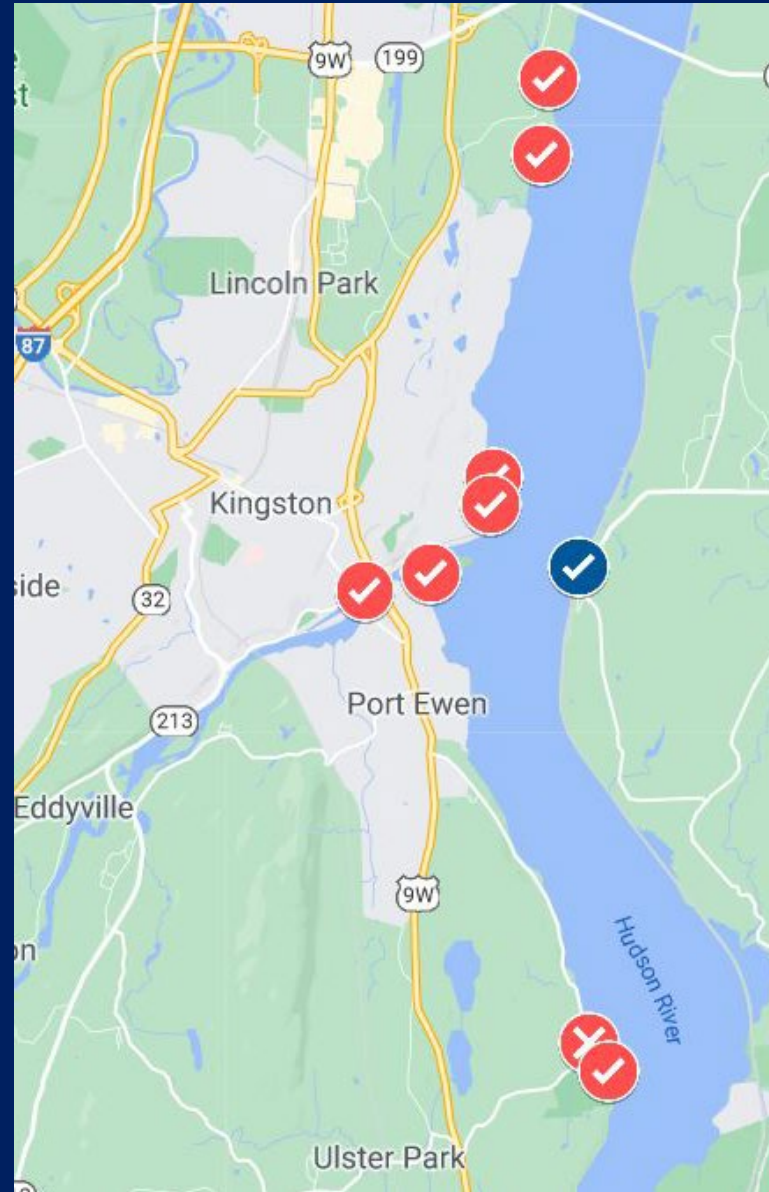
- NYS DOH developed signs with input from local focus groups
- Signs are free to property owners and are available in English, Spanish, and Chinese
- Posting signs is voluntary on the part of property owners

Maintaining a Sign Program

- Signs require maintenance – are frequently damaged or removed
- Staff do annual/semi-annual inspections of signage at fishing access sites south of the Federal Dam in Troy
- Over 500 signs have been mailed
- Actively manage about 120 sites between the Federal Dam and NYC
- Sites primarily include state and municipal public access points (parks, boat launches)
- If signs needed, find property owners and follow up by letter and phone calls

Future Addition: Google Map of Sign Locations

- Making a public interface to our database
- Check mark means signs are posted
- “X” means no signs
- Clickable and shows some details about correspondence



← Hudson River Fish Advisory ... ✕

TR GALLO WATERFRONT PARK - KINGSTON

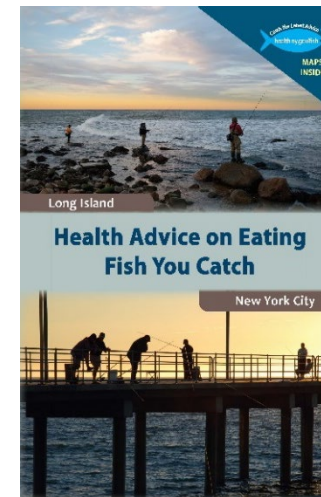
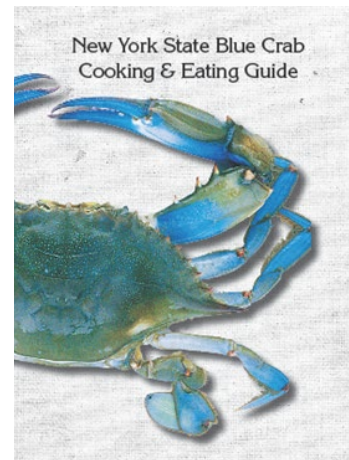
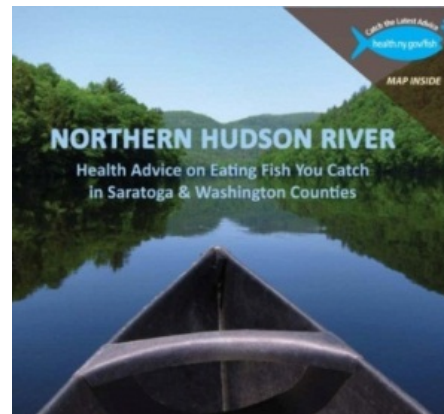
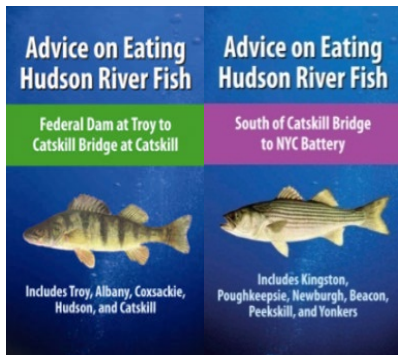
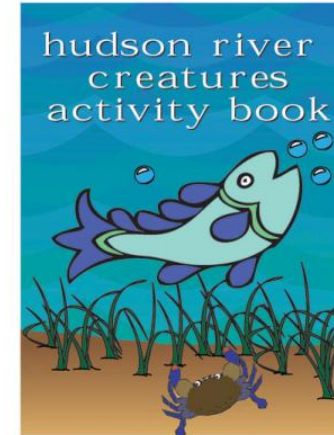
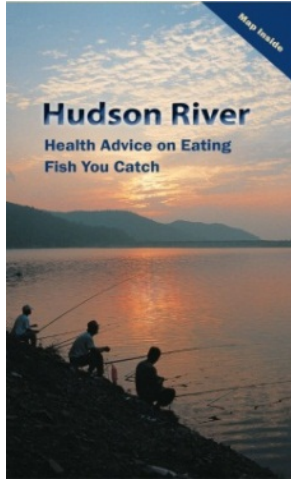
2019 - 1 Spanish warning, 1 English warning, 1 Spanish notice.
Missing 1 English notice

2017- 1 English, 1 Spanish warning posted on pier, mailed 2 more signs

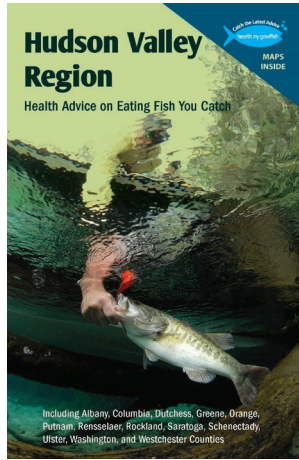
2014- mailed 3 English 3 Spanish

2013- no signs

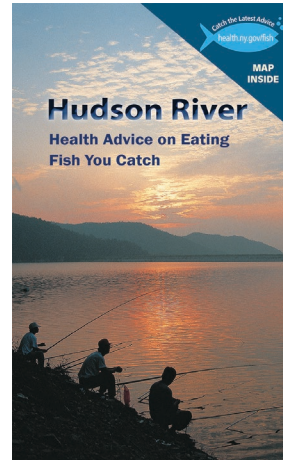
Free Hudson River Fish Advisory Materials



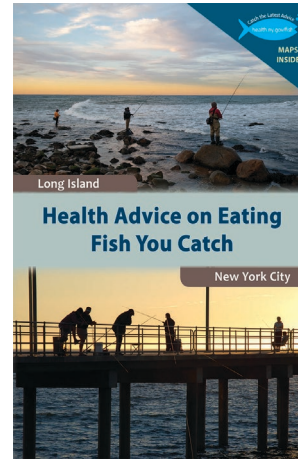
Expanded Languages Available



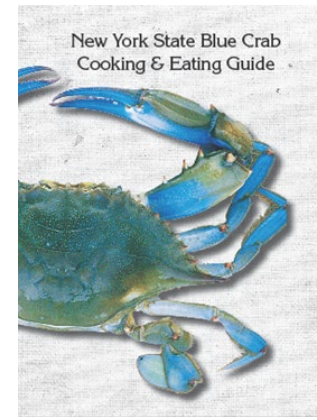
- English
- Spanish
- Simplified Chinese
- Haitian Creole
- Russian
- Polish



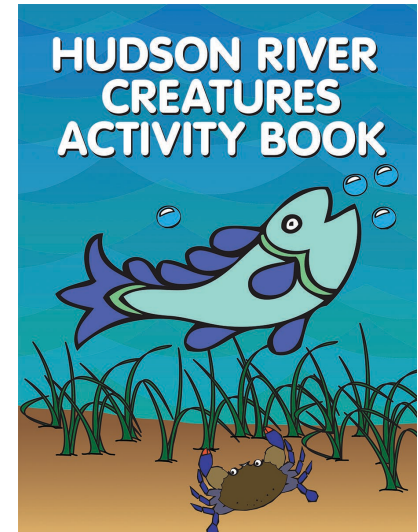
- English
- Spanish
- Simplified Chinese
- Haitian Creole
- French



- English
- Spanish
- Simplified Chinese
- Traditional Chinese
- Haitian Creole
- Russian
- Polish
- Korean



- English
- Spanish
- Simplified Chinese
- Traditional Chinese



- English
- Spanish
- Simplified Chinese

Hudson Valley Region

Health Advice on Eating Fish You Catch



MAPS
INSIDE

Answering “Where Can I Eat the Fish?”

- Positive messaging to encourage following the advice
 - suggest where a family can eat fish as healthier alternatives
- 2015 - Hudson Valley Region published
- Has advice for all waters in 13 Hudson River counties
- Also includes a list of waters with public access where the family can eat fish
- In English, Spanish, Chinese, Haitian Creole, Russian, and Polish
- ~ 4,000 distributed each year

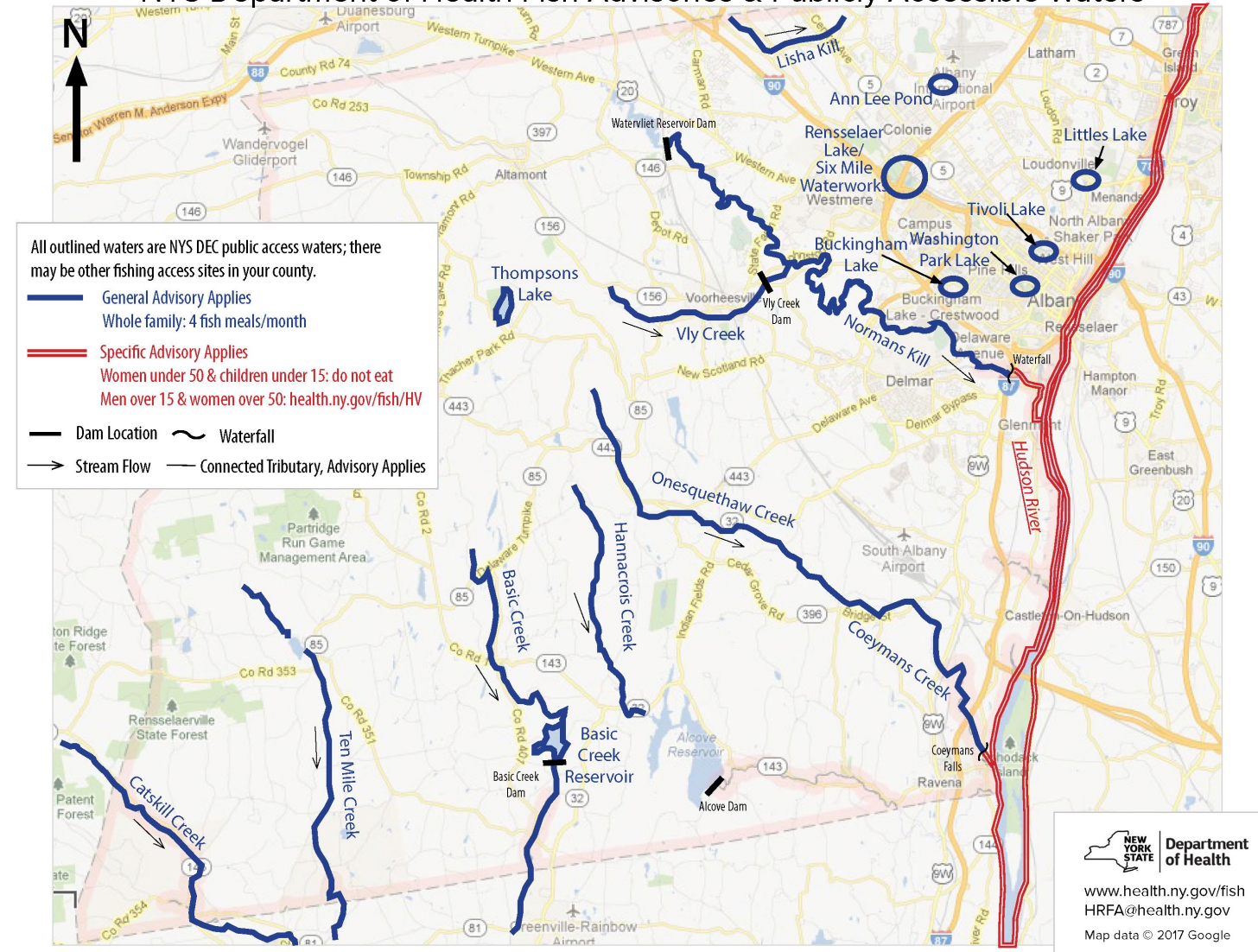
Including Albany, Columbia, Dutchess, Greene, Orange, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Ulster, Washington and Westchester Counties

Maps Help People Make Better Choices

- Color coded public access fishing waters maps now available for the entire Hudson Valley
- **Blue waters** = waters where the whole family can eat fish from
- **Red waters** = waters that have specific advice (women and kids should not eat fish from these waters)

Albany County Fishing Waters

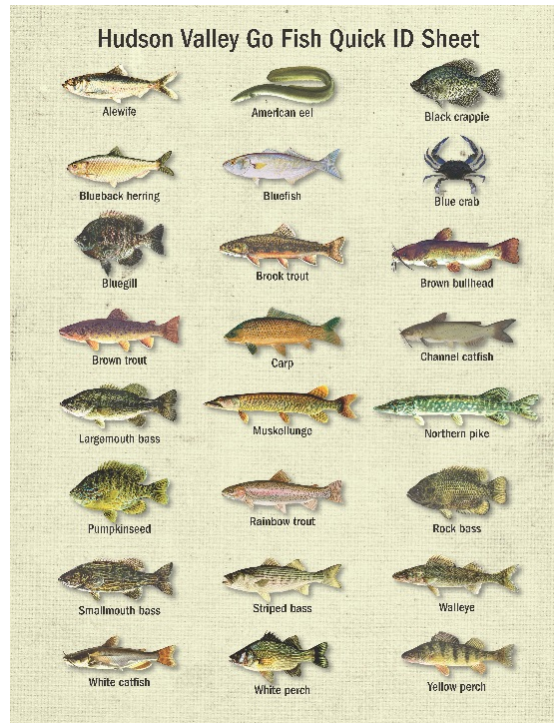
NYS Department of Health Fish Advisories & Publicly Accessible Waters



www.health.ny.gov/fish/maps.htm

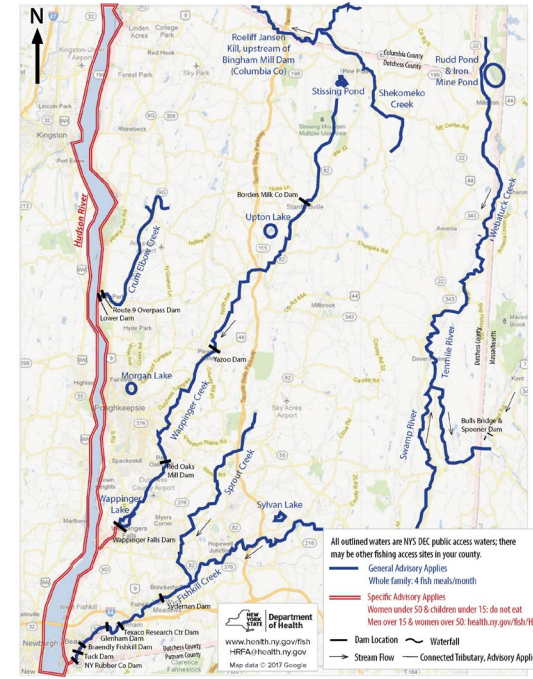


Pick a fish



ID the fish

Dutchess County Fishing Waters
NYS Department of Health Fish Advisories & Publicly Accessible Waters



Can you keep your fish or should you throw it back?

Red Waters

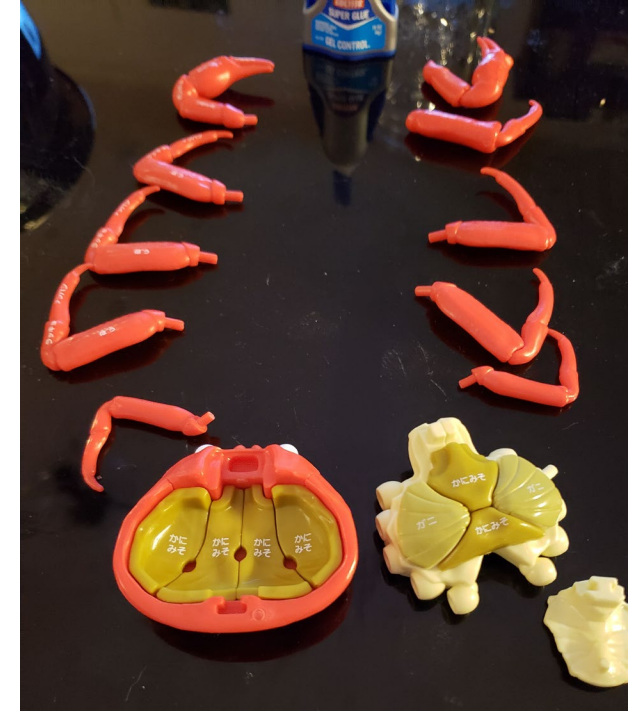
Families should avoid eating fish from waters in red. Throw it back!

Blue Waters

Fish from blue waters are a good choice for the whole family. You can keep your fish!

Keep it or throw it back

Interactive "Go Fish" Game



Hands On Learning!

PCBs in Hudson River Fish

The Hudson River has one of the highest levels of PCB pollution of any river on the East Coast. In this module, students will learn about the history of PCB's in the Hudson, how PCB's get into the fish we eat, and what has been done to remove PCB's from the Hudson River. Students will also gain experience analyzing data by exploring how levels of PCB's vary over time, location, and between different species of fish. There are separate versions of the lessons that are appropriate for middle school and high school students.

Lesson 1: Exploring Hudson River PCB data

Students will know how to answer the question, "How likely is it that a striped bass caught near where the students live on the Hudson River will be above the FDA supermarket standard of 2 ppm?" and be able to provide evidence to support their answer.

Lesson 2: Do Hudson River striped bass PCB levels vary by location?

Students will know how to answer the question, "Are fish more contaminated from different locations in the River?" and be able to provide evidence to support their answer.

Lesson 3: Which fish should I eat?

Students will know how to answer the question, "Are some fish less harmful to eat from the Hudson River than others?" and be able to provide evidence to support their answer.

- caryinstitute.org/educators/teaching-materials/hudson-river-ecology/pcbs-hudson-river-fish
- health.ny.gov/hudsonriverfish



Questions? Contact Rhea Esposito: espositor@caryinstitute.org

2018 Cary Institute Hudson River Fish PCB Lesson Plans

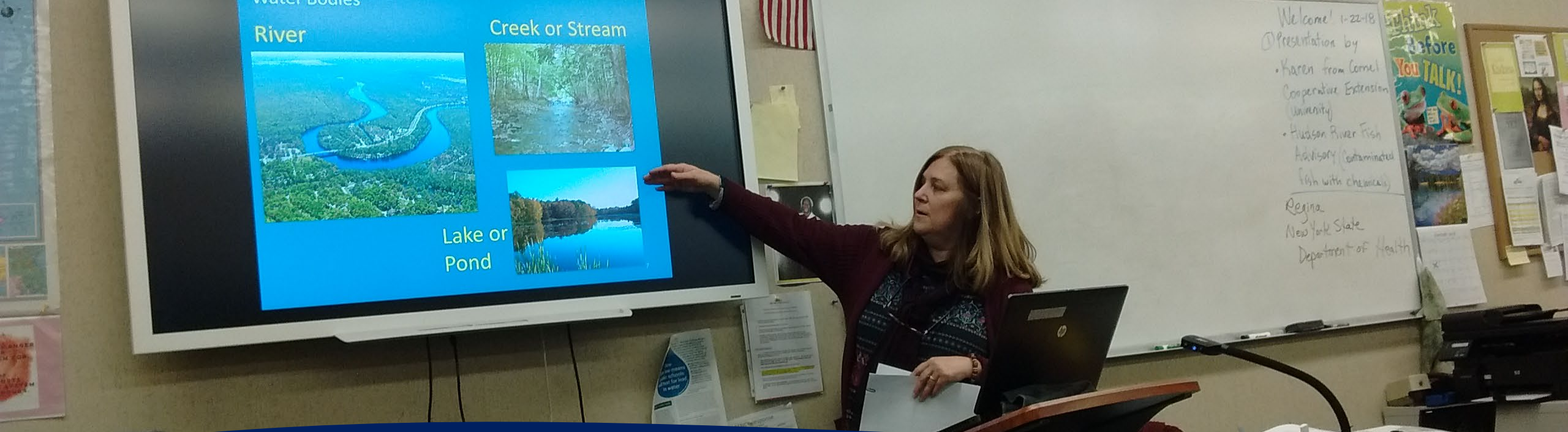
- Free lesson plans available for high school and middle school aged children
- Created through a grant from the NYS DOH Hudson River Fish Advisory Program to the Cary Institute for Ecosystem Studies in collaboration with DEC
- Students learn about the history of PCBs in the Hudson, how PCBs get into the fish we eat, and gain experience analyzing fish data
- Available here: caryinstitute.org/educators/teaching-materials/hudsonriverecology/pcbs-hudsonriver-fish

Outreach to Newcomers



Outreach to Newcomers

- Often are less aware of contamination
- Need to rely on community partners to identify and connect
- Cultural practices – may eat whole fish, like fatty species like catfish, make fish paste, eat crab tomalley (mustard)
- Language and literacy barriers - develop and use different strategies
- Some newcomers eat substantially more local fish than average licensed angler
 - In a NYS DOH study in Buffalo, people from Burma ate five times more fish than licensed anglers (average of 102 locally-caught fish meals per year)



Reaching the Hard to Reach

- NYS DOH and partners work with many immigration and newcomer coalitions
- In a collaboration with Albany BOCES, NYS DOH and Albany CCE staff presented to 60+ English language learner and GED classes since 2018
- Presentation teaches vocab, about the fish advisory, and highlights healthy places to eat fish locally
- Yearly activities are detailed in our Hudson River Project Updates (on NYS DOH website)

Consumption Surveys



HRFA Fish Consumption Surveys – Tools to Foster Understanding

NYS DOH and partner surveys meet two important outreach goals:

- Targeting program resources over a large geographic area
 - Where are anglers fishing most frequently?
 - What are anglers eating and how do they cook fish?
 - Are they sharing fish?
- Education – anglers receive customized fish advisory information after the survey
 - The surveys help initiate conversation
 - Provides an opportunity for staff to tailor advice given to the angler based on survey responses

Caveat: the surveys are not statistically representative, not a Creel survey

Survey Considerations

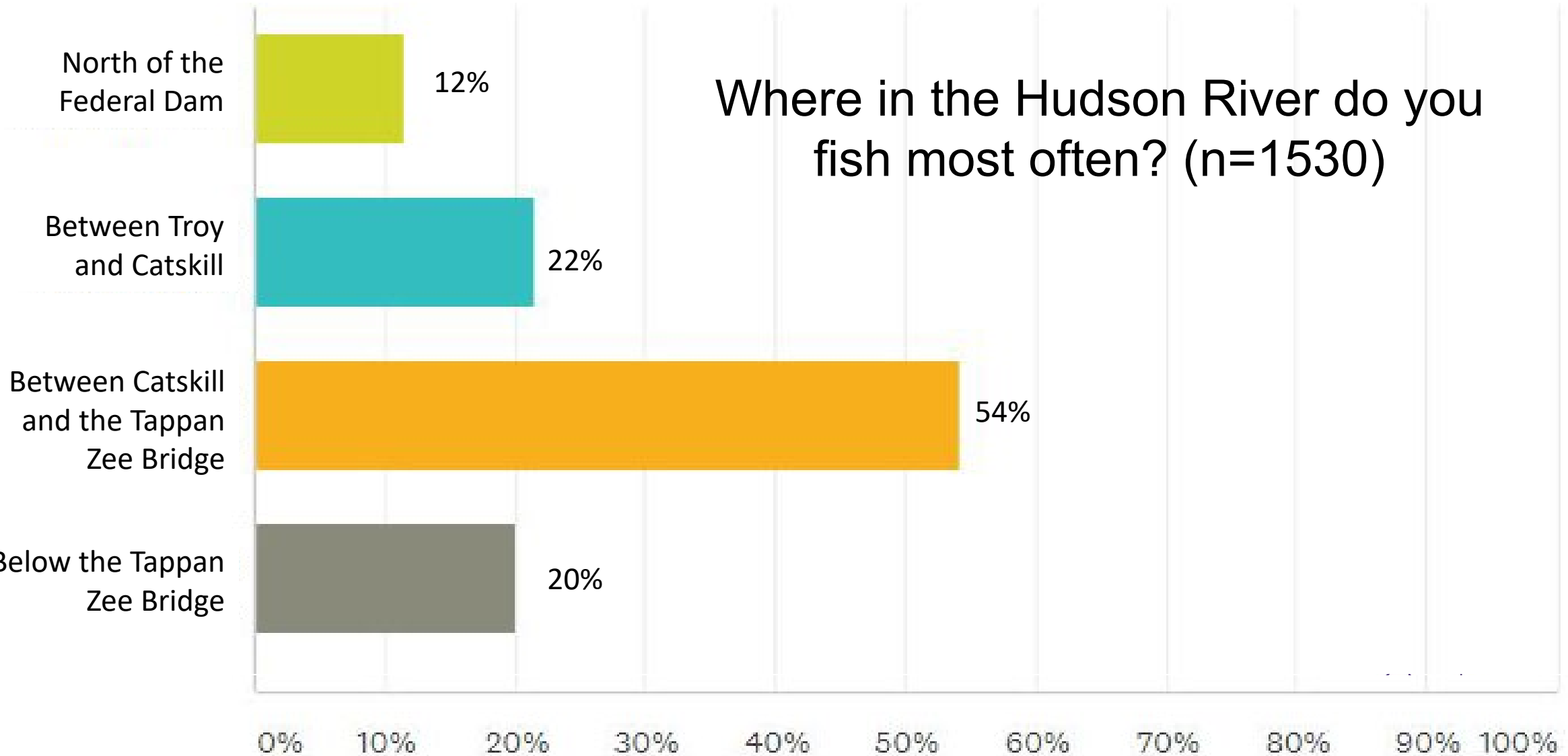
- Are self-report, reflect bias of who chooses to participate
- Convenience sample- collected at a variety of community locations
- NYS DOH & Saratoga CCE surveys - must be a Hudson River angler
- Dutchess CCE survey - anyone can take



Survey Considerations Continued:

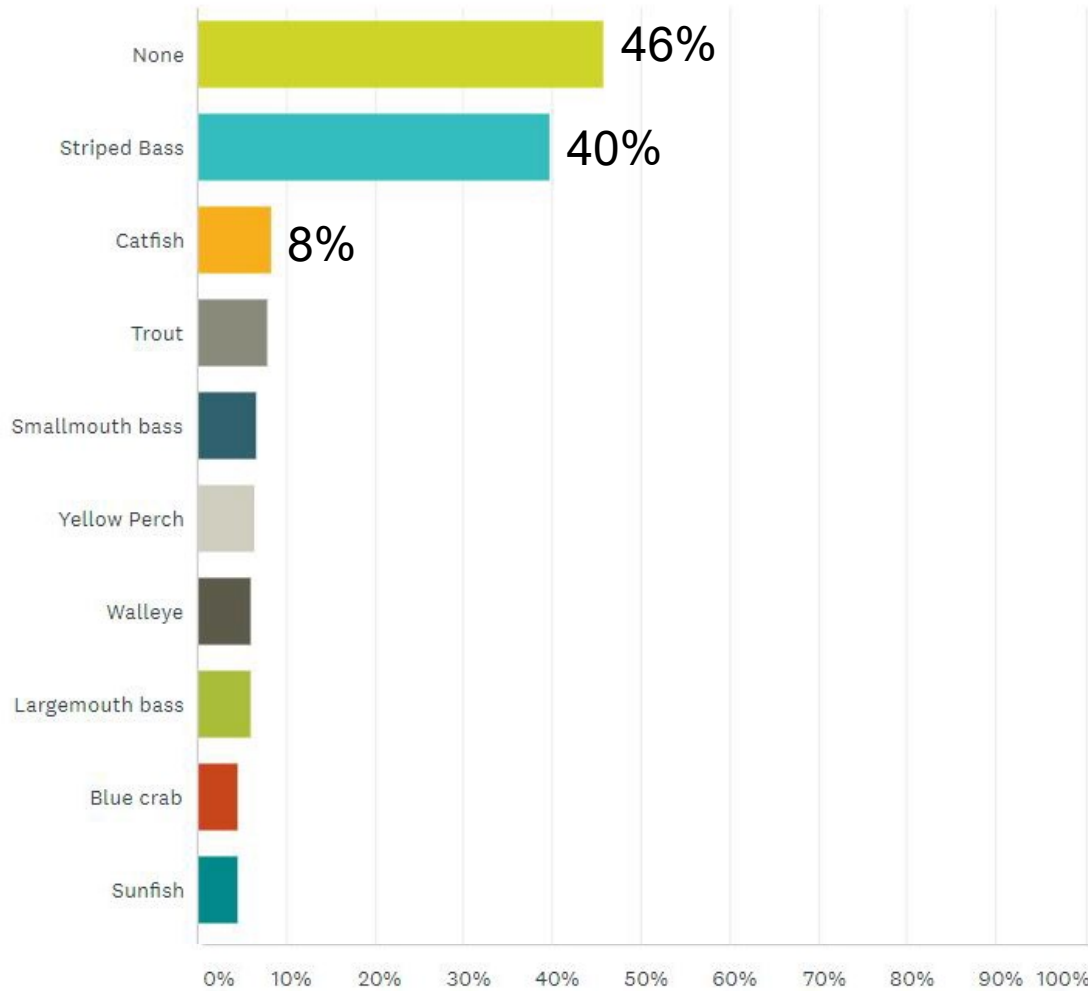
- Surveys are very short
- People can skip questions, and some questions allow multiple responses (% totals may not always = 100%)
- Survey collection has been ongoing since 2013
- NYS DOH has collected 1,667 surveys at outreach events attended between Saratoga/Washington Co and NYC
- Link to survey results available in project reports

Where in the Hudson River do you fish most often? (n=1530)

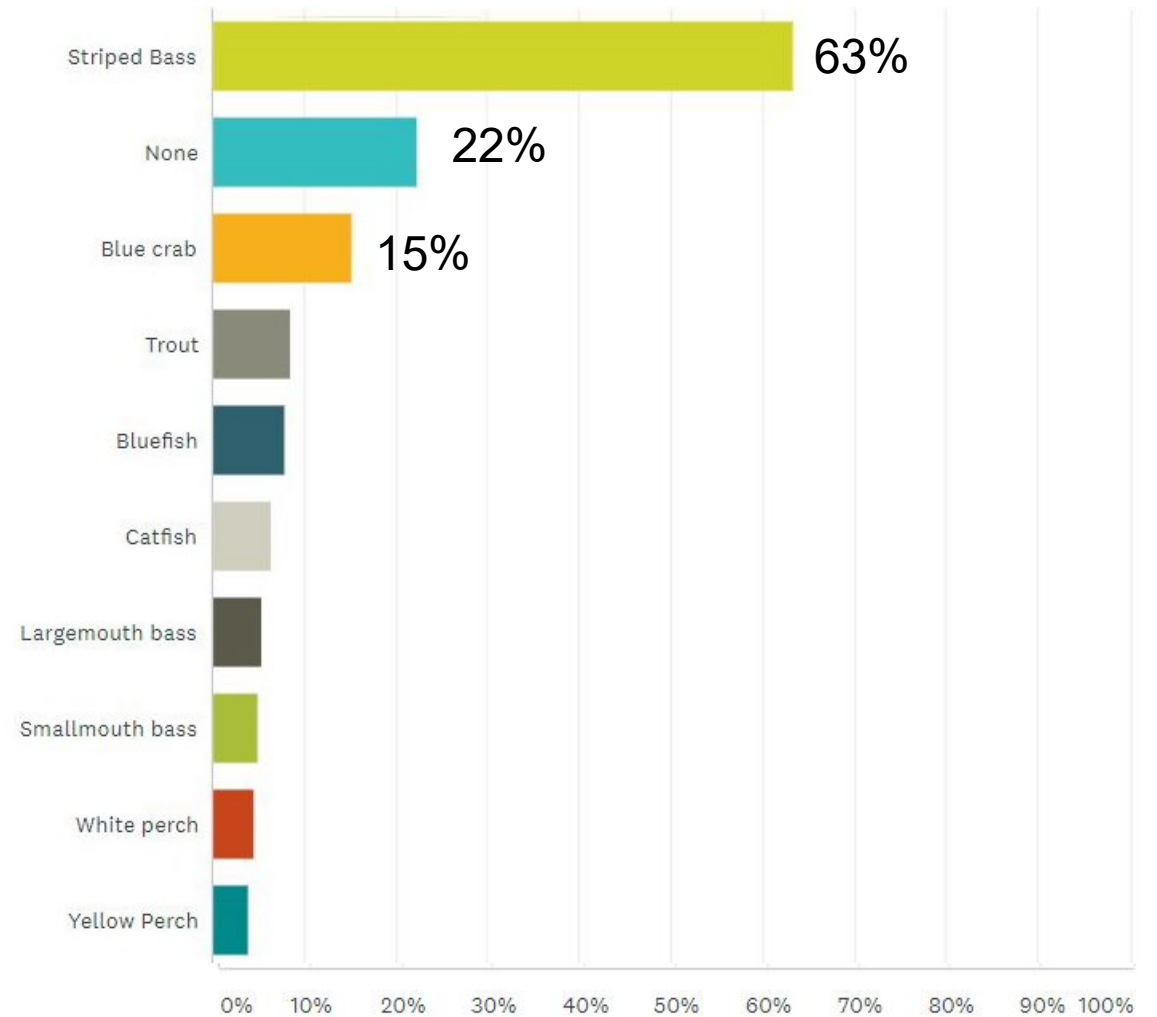


What fish do you most frequently eat from the Hudson River?

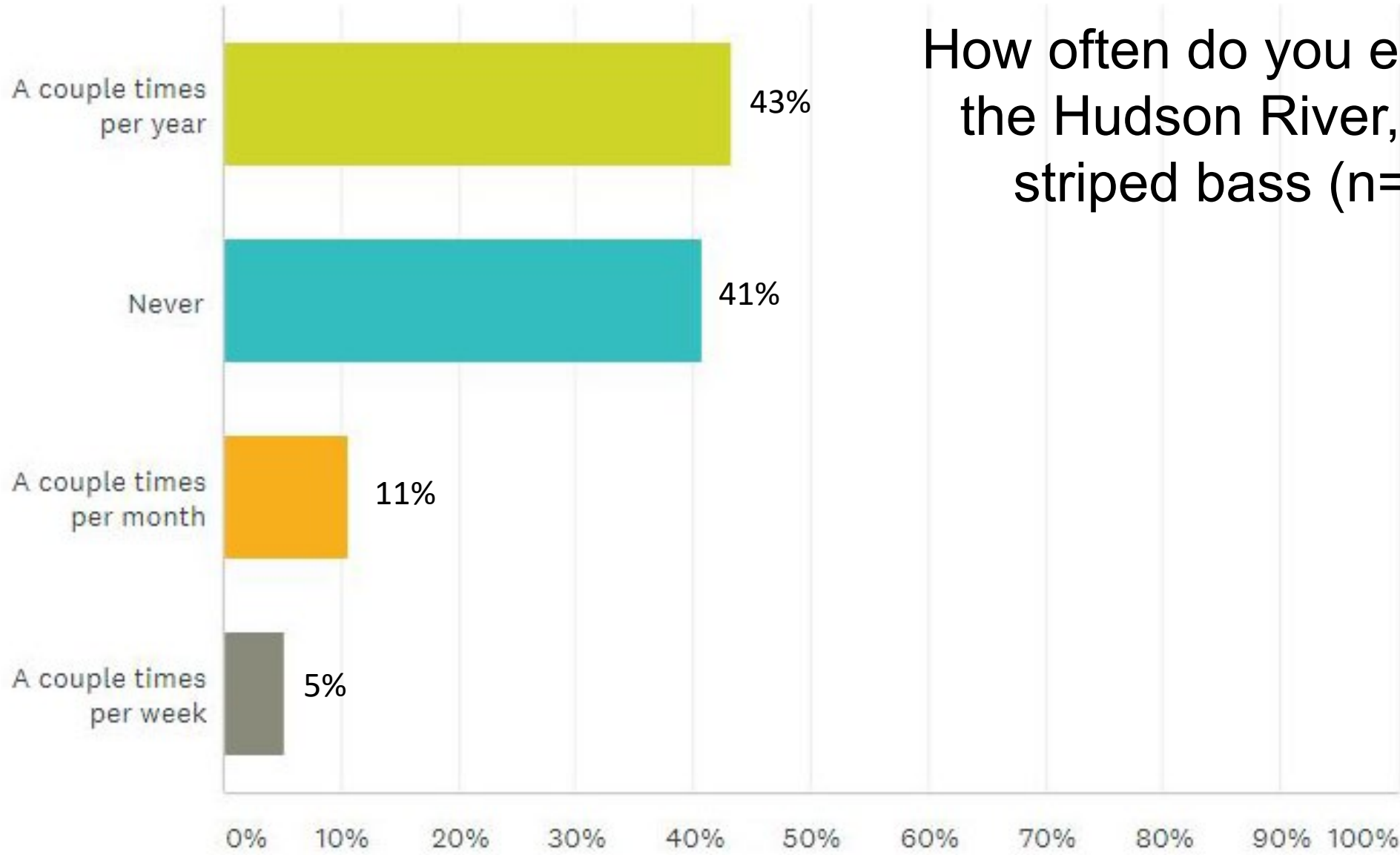
Usually fish between Troy and Catskill (n=266)



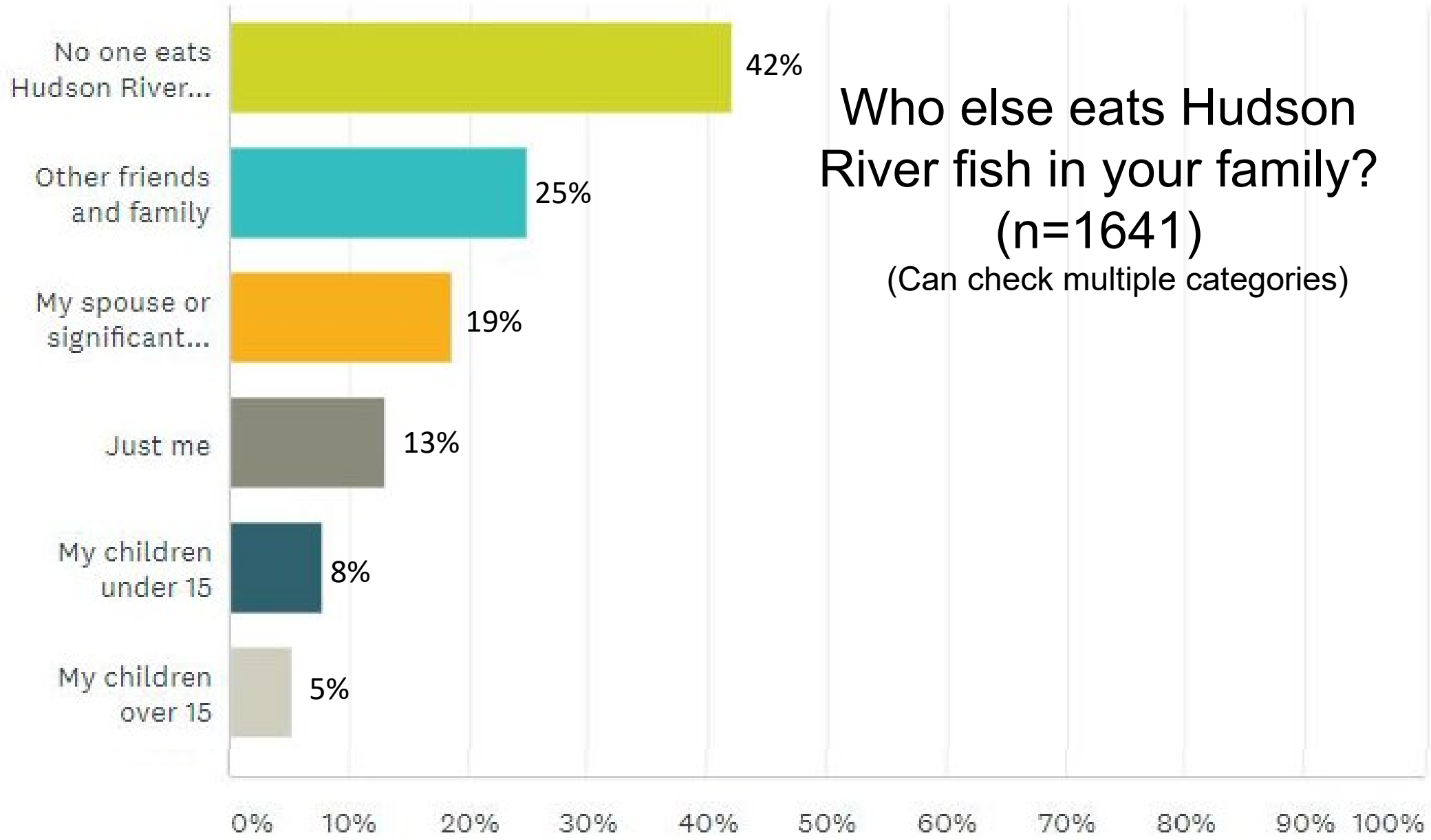
Usually fish between Catskill and the Battery (n= 810)



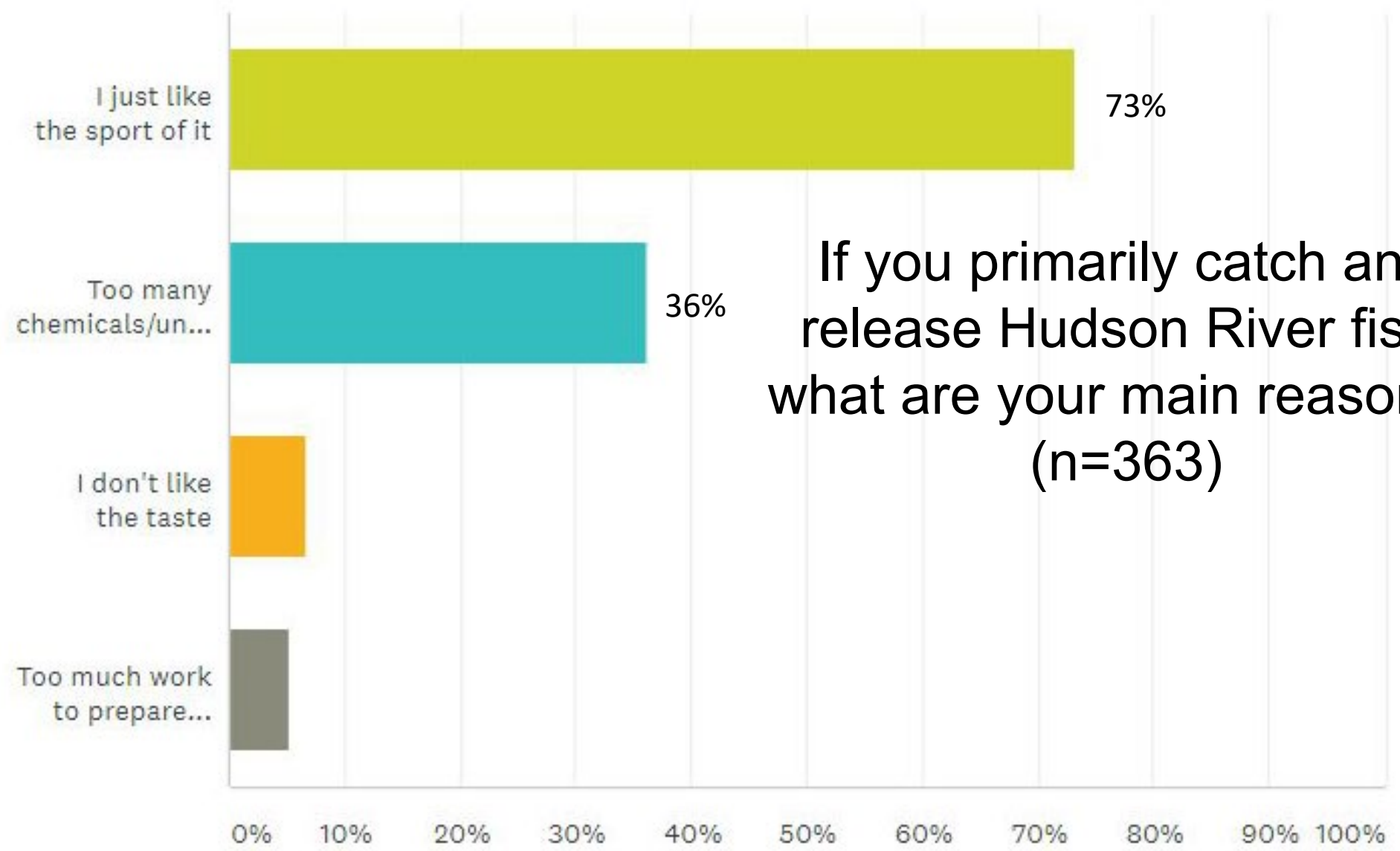
How often do you eat fish from the Hudson River, including striped bass (n=1634)?



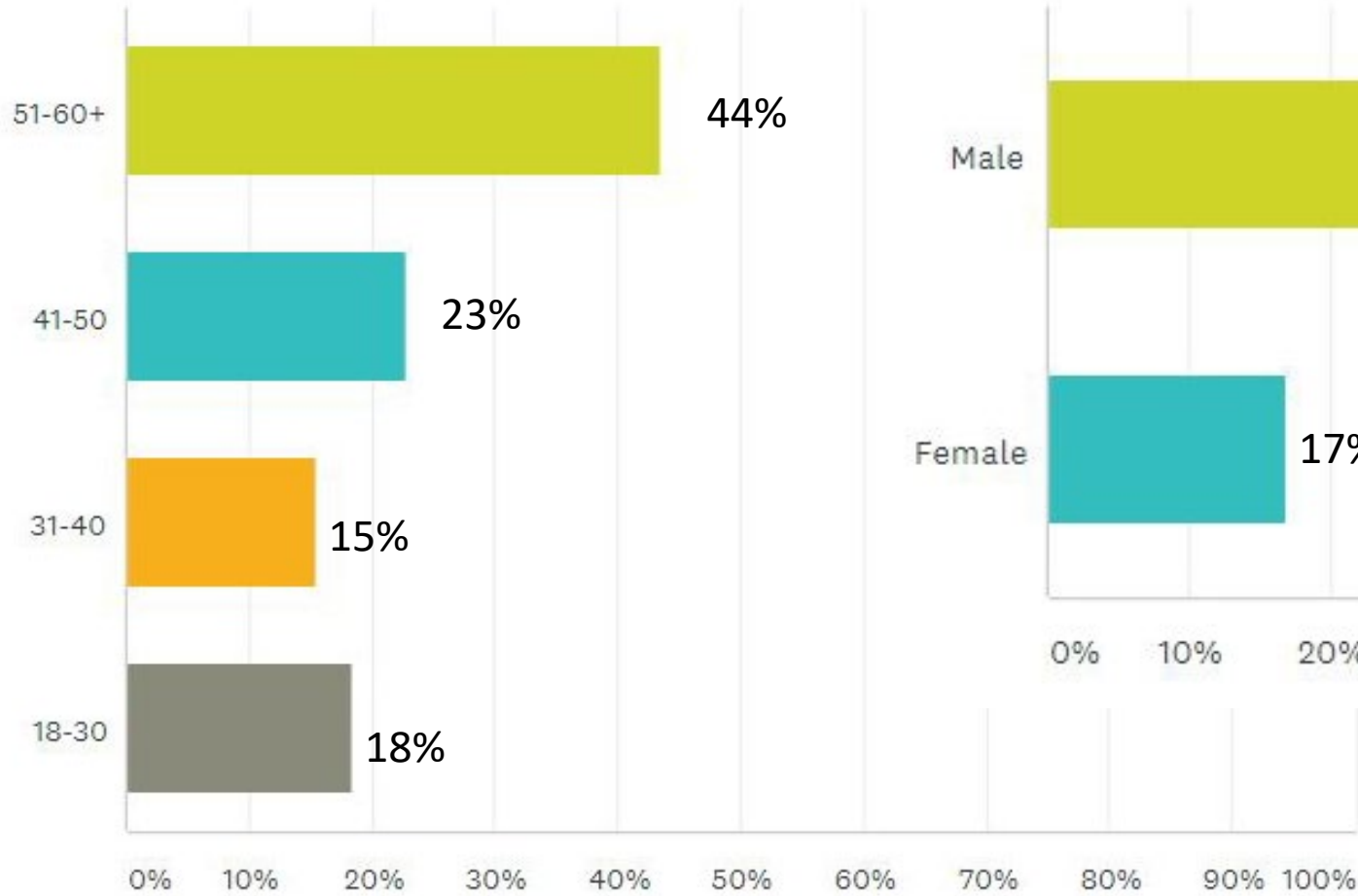
Who else eats Hudson River fish in your family? (n=1641) (Can check multiple categories)



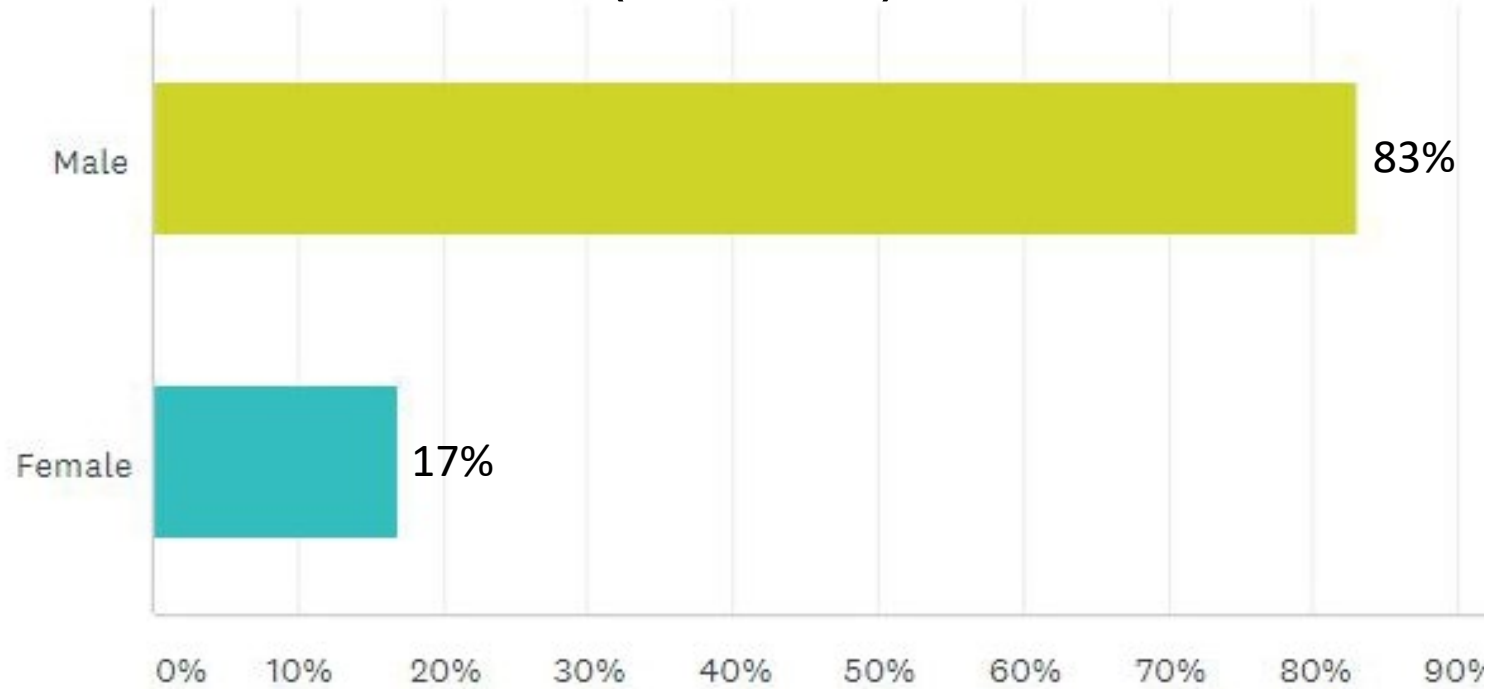
If you primarily catch and release Hudson River fish, what are your main reasons?
(n=363)

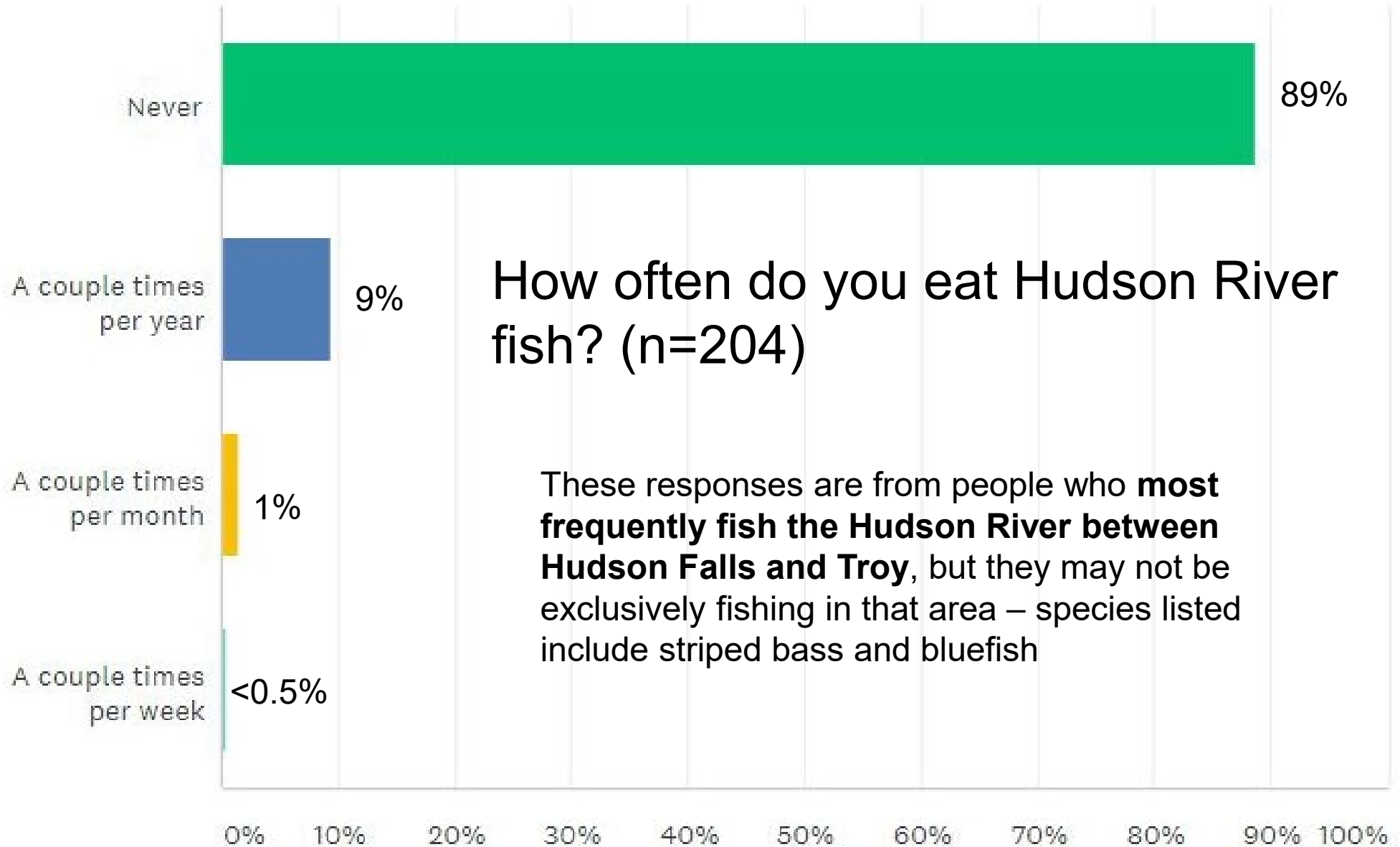


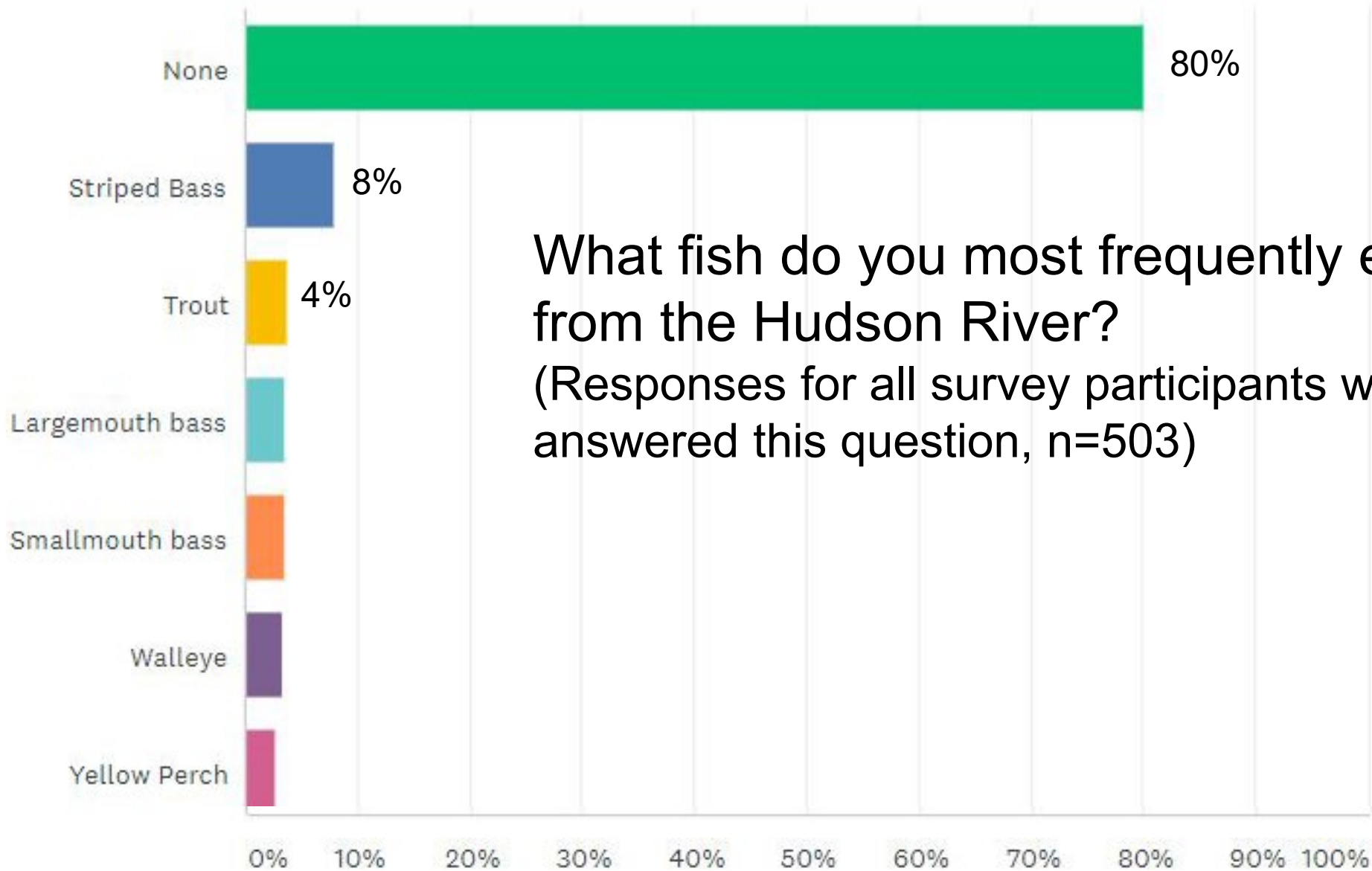
What is your age? (n=1618)



What is your gender? (n=1598)

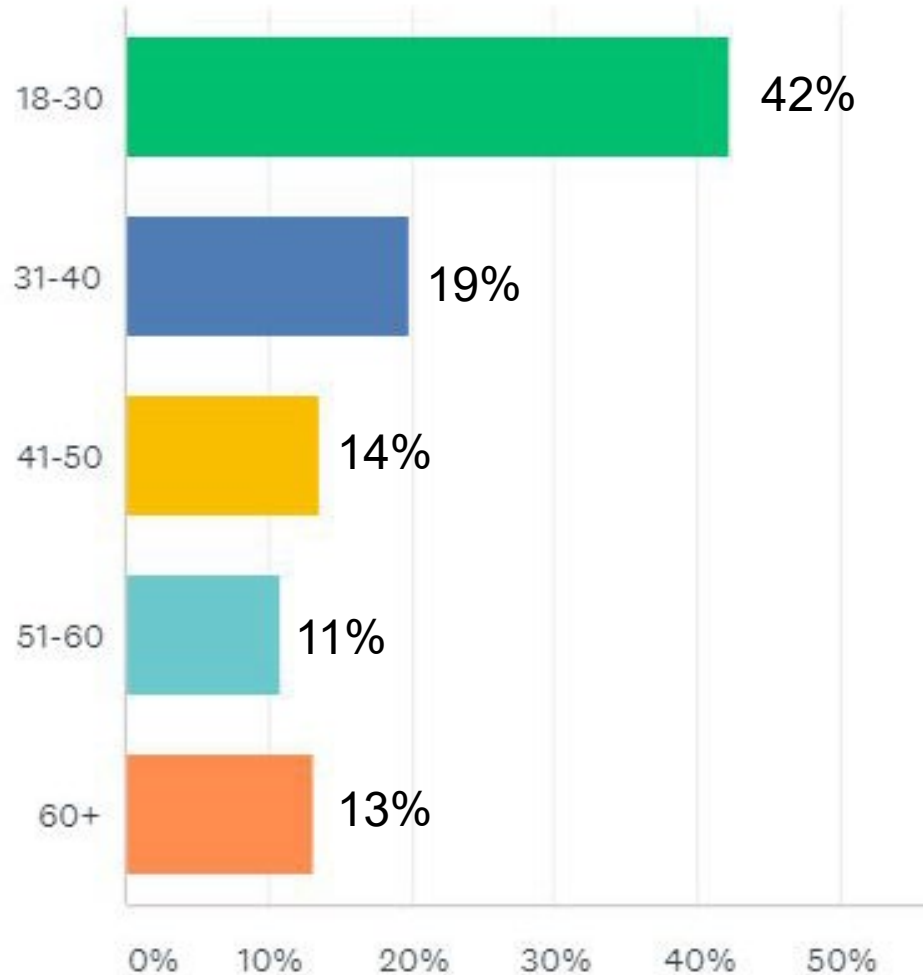




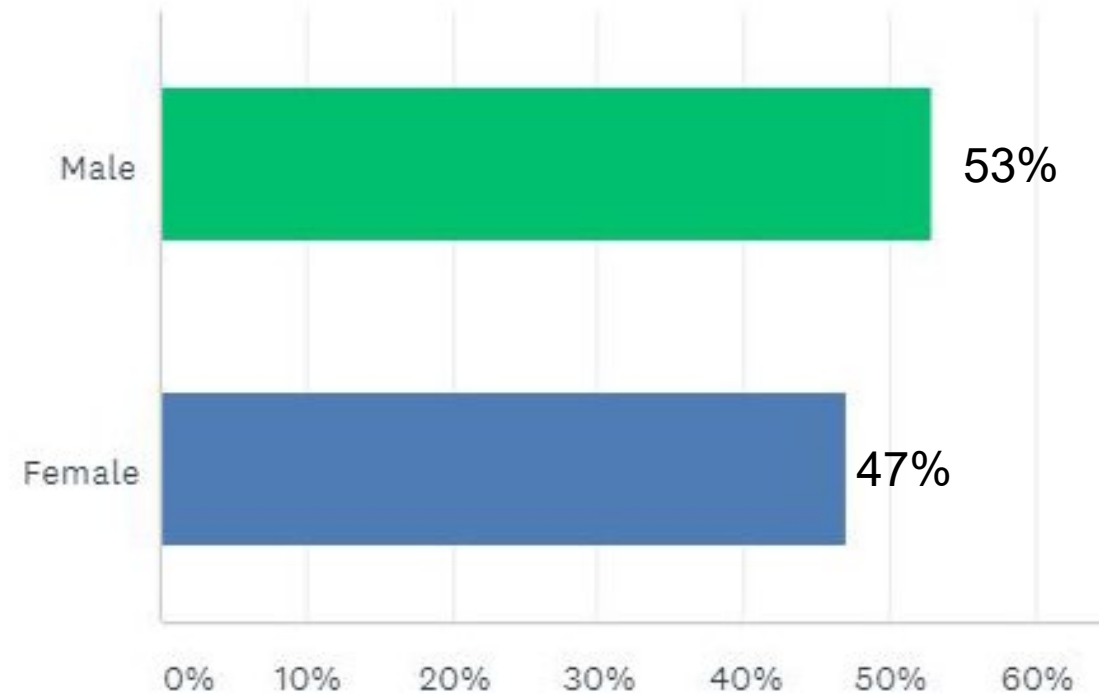


What fish do you most frequently eat from the Hudson River?
(Responses for all survey participants who answered this question, n=503)

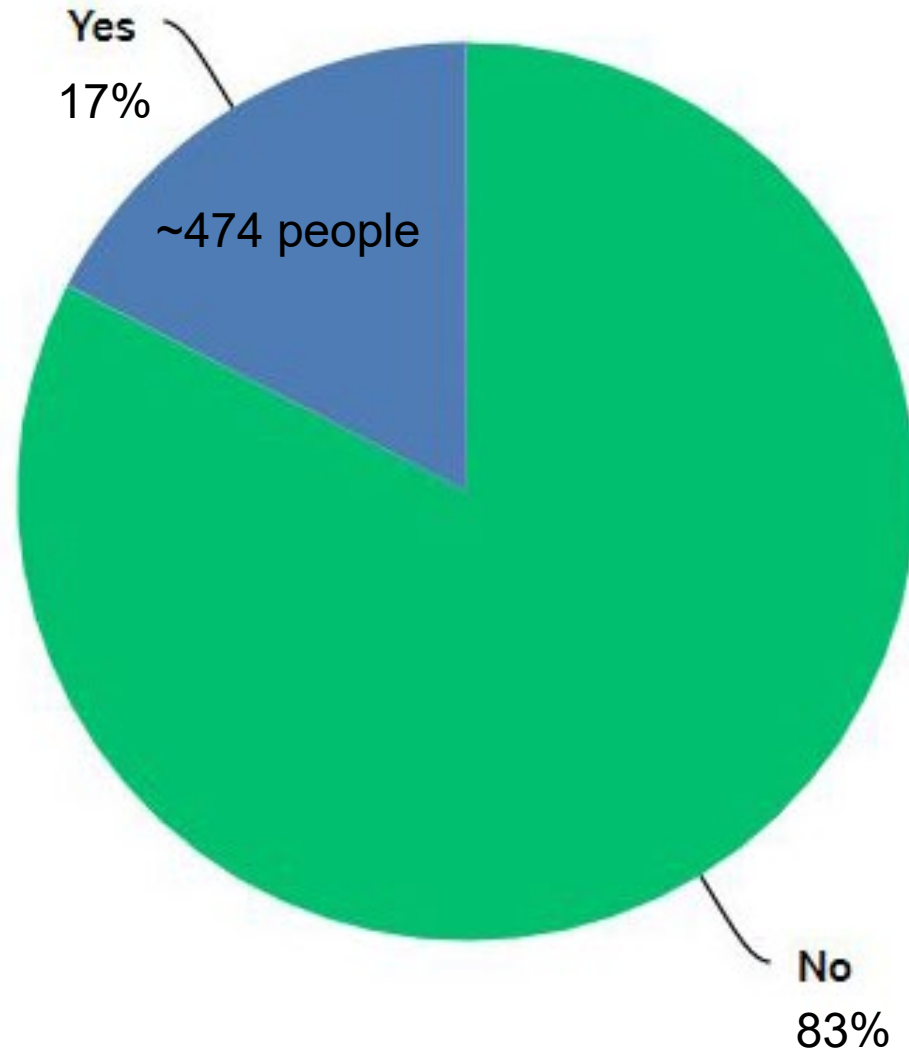
What is your age? (n=823)



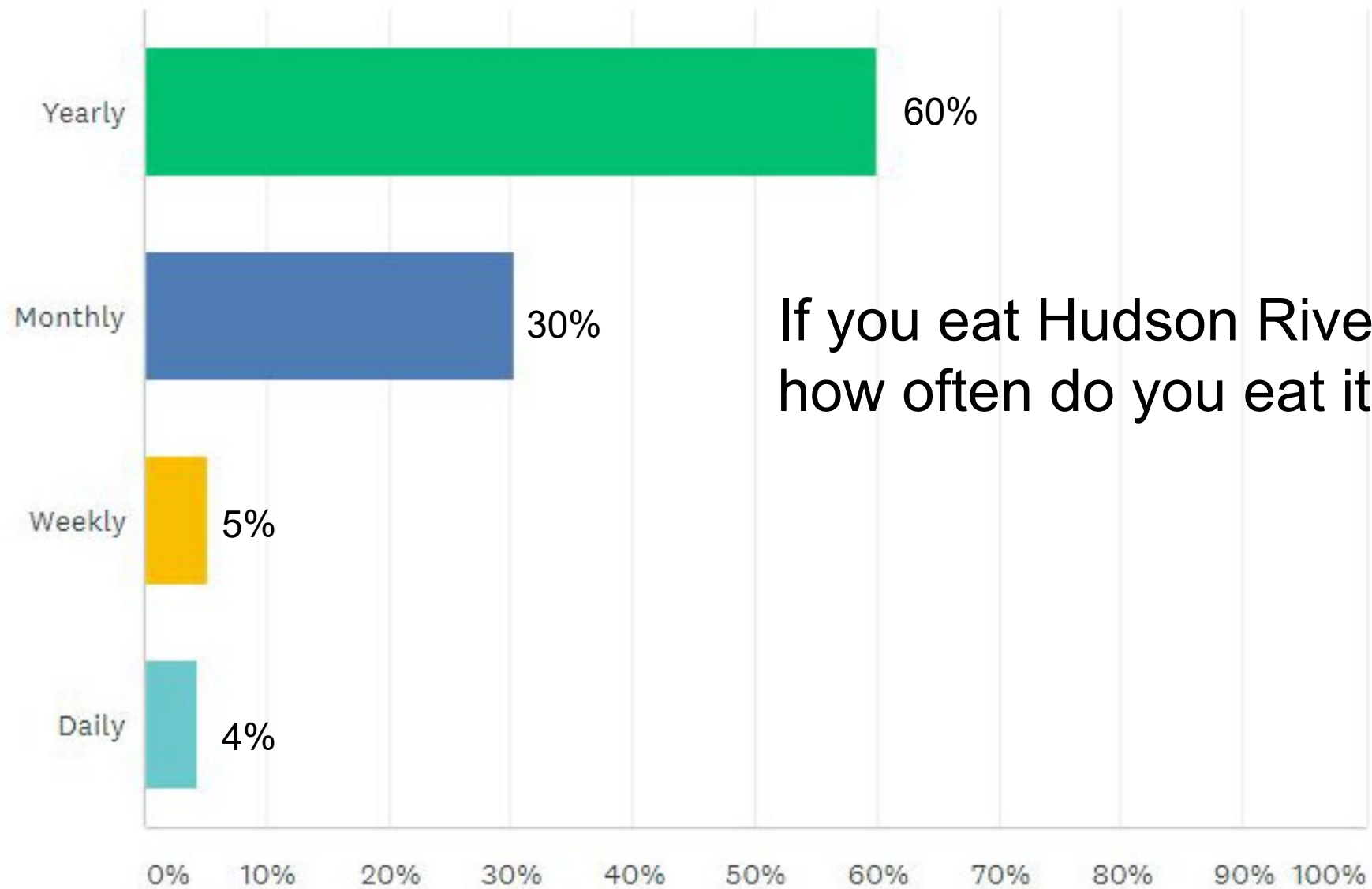
What is your gender? (n=826)



Do you eat fish that you or someone you know caught LOCALLY? (n=2786)

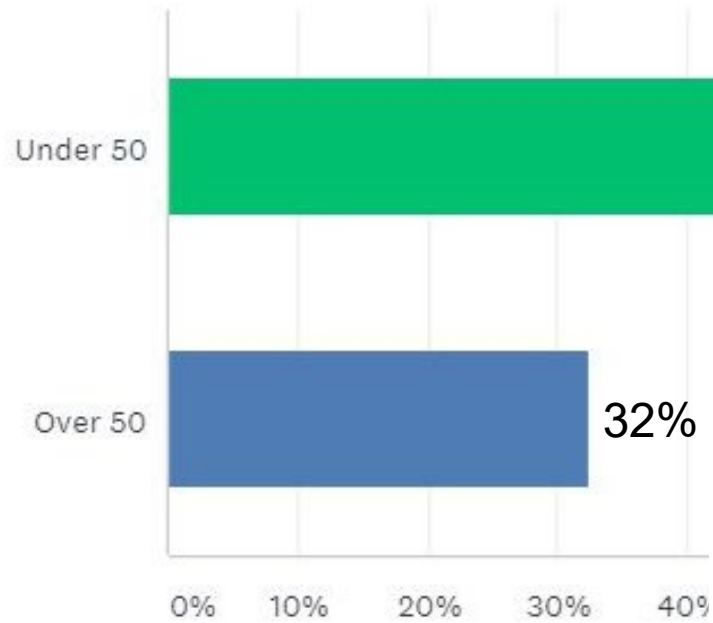


- CCE Dutchess results include responses from Dutchess, Ulster, Greene, Columbia, and Orange Counties
- Surveys are collected at food banks, low-income daycare centers, clinics, and other sites used to recruit nutrition program clients
- Anyone can take survey, not just Hudson River anglers

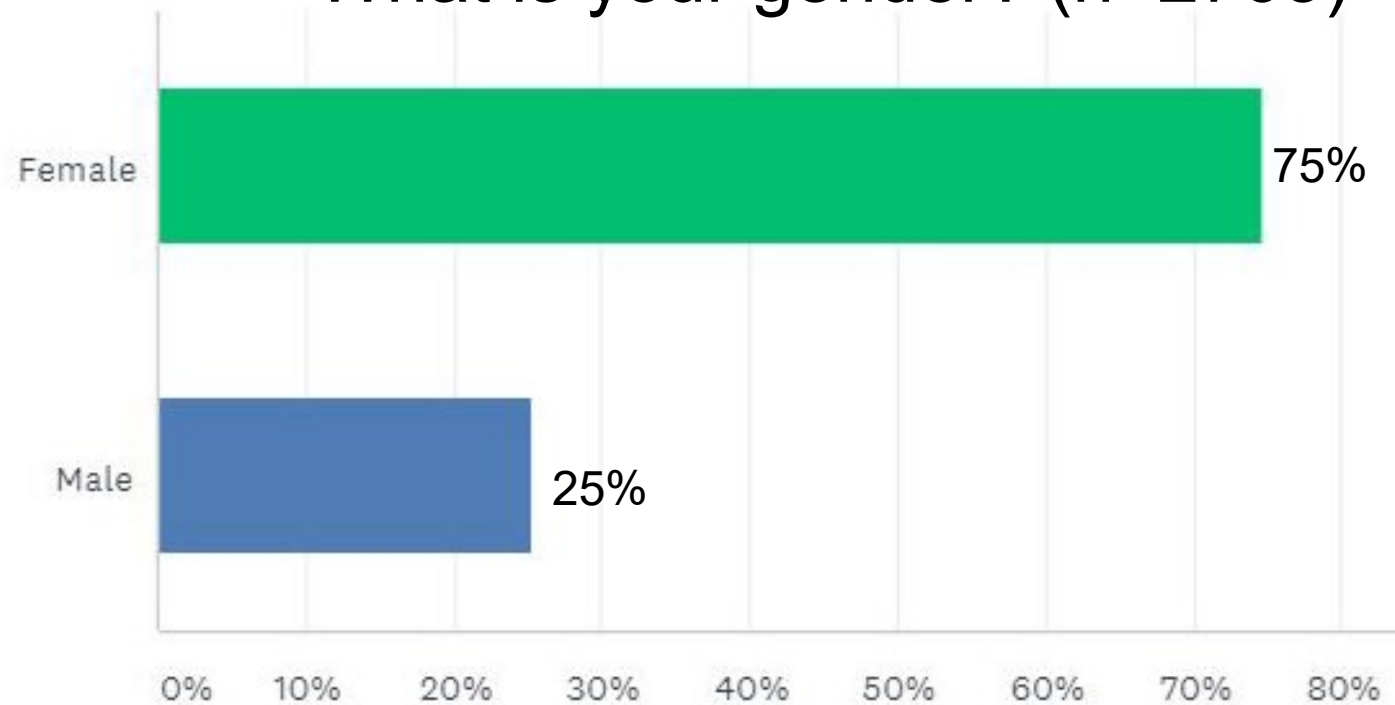


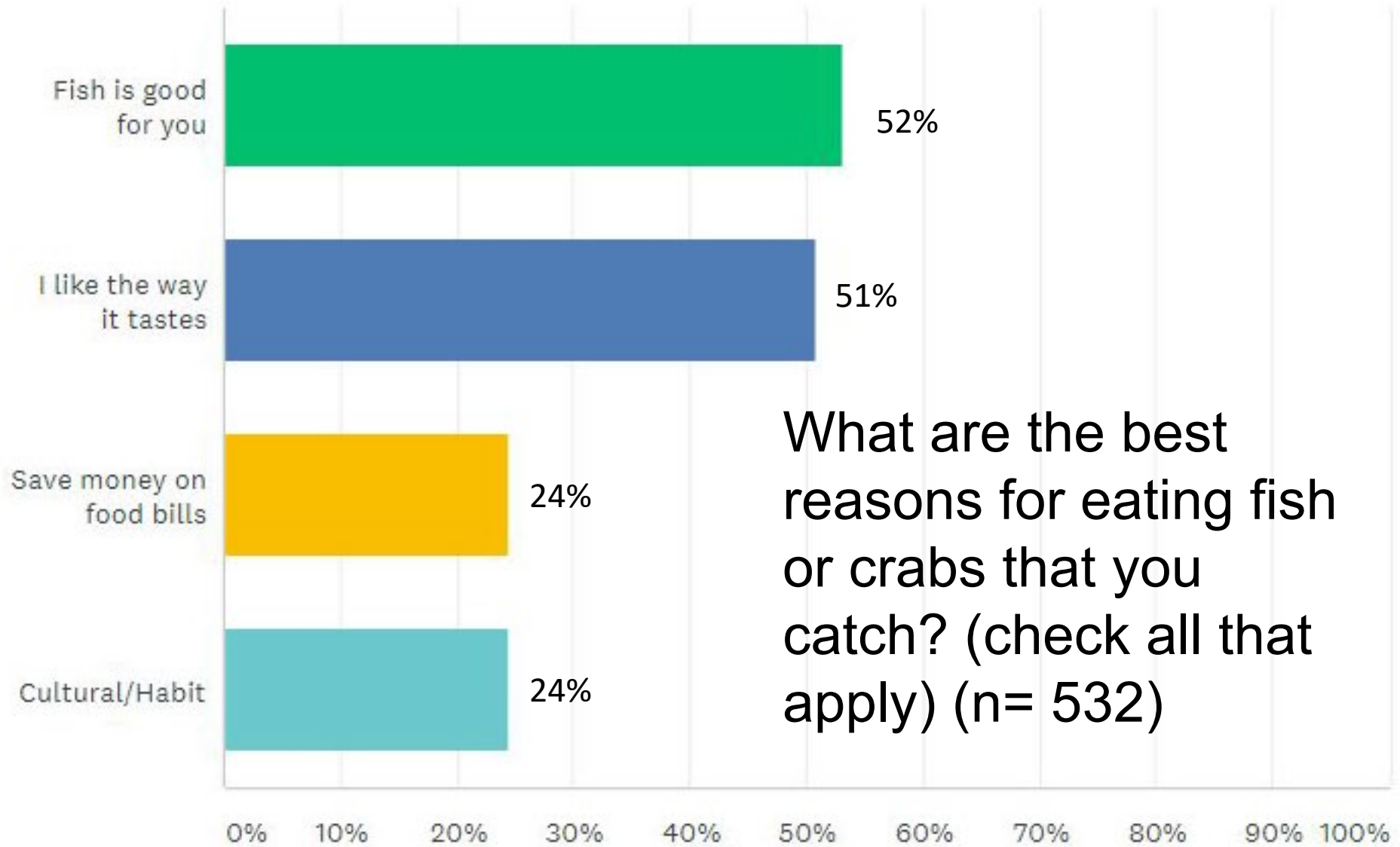
If you eat Hudson River fish, how often do you eat it? (n=115)

What is your age? (n=2514)



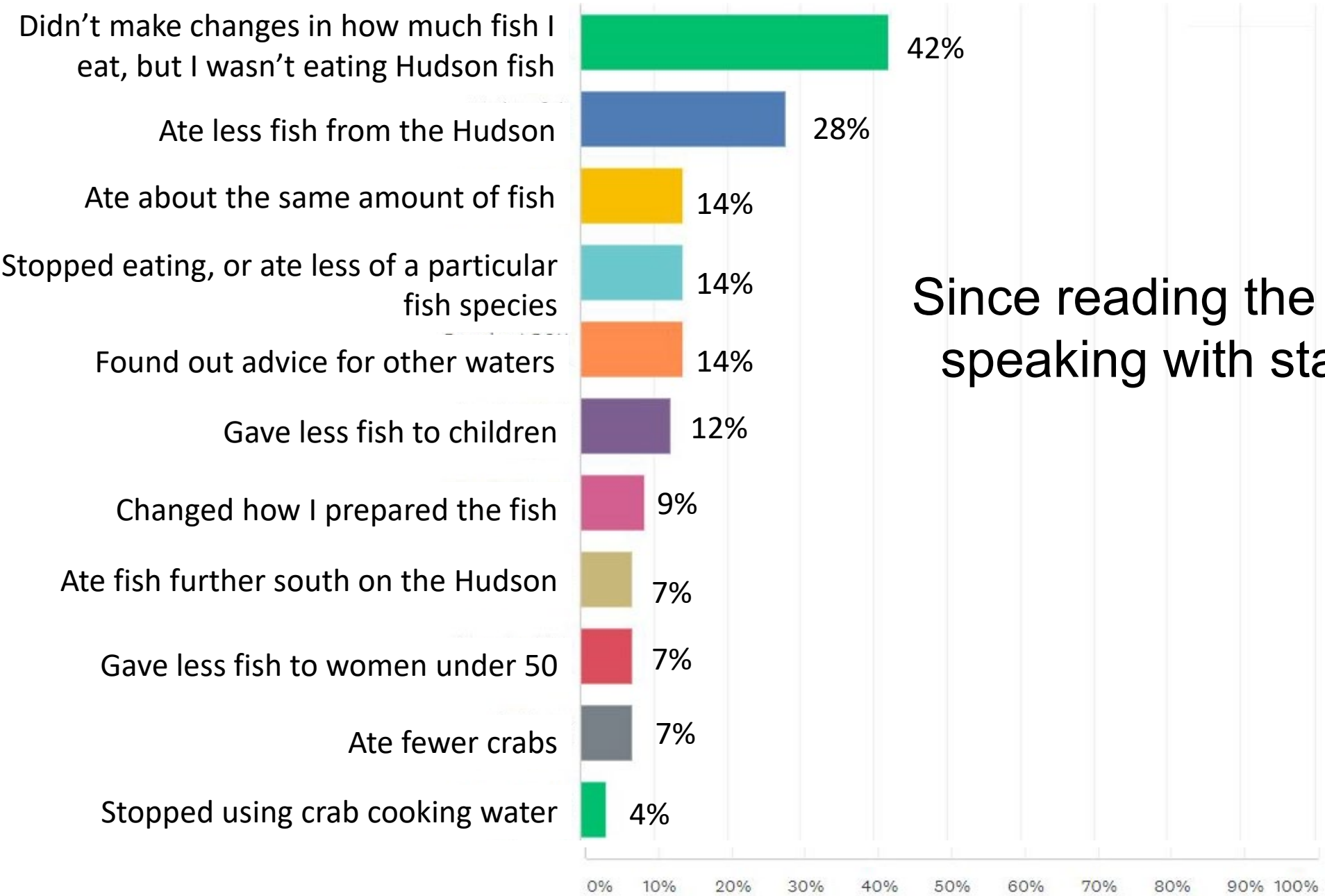
What is your gender? (n=2765)





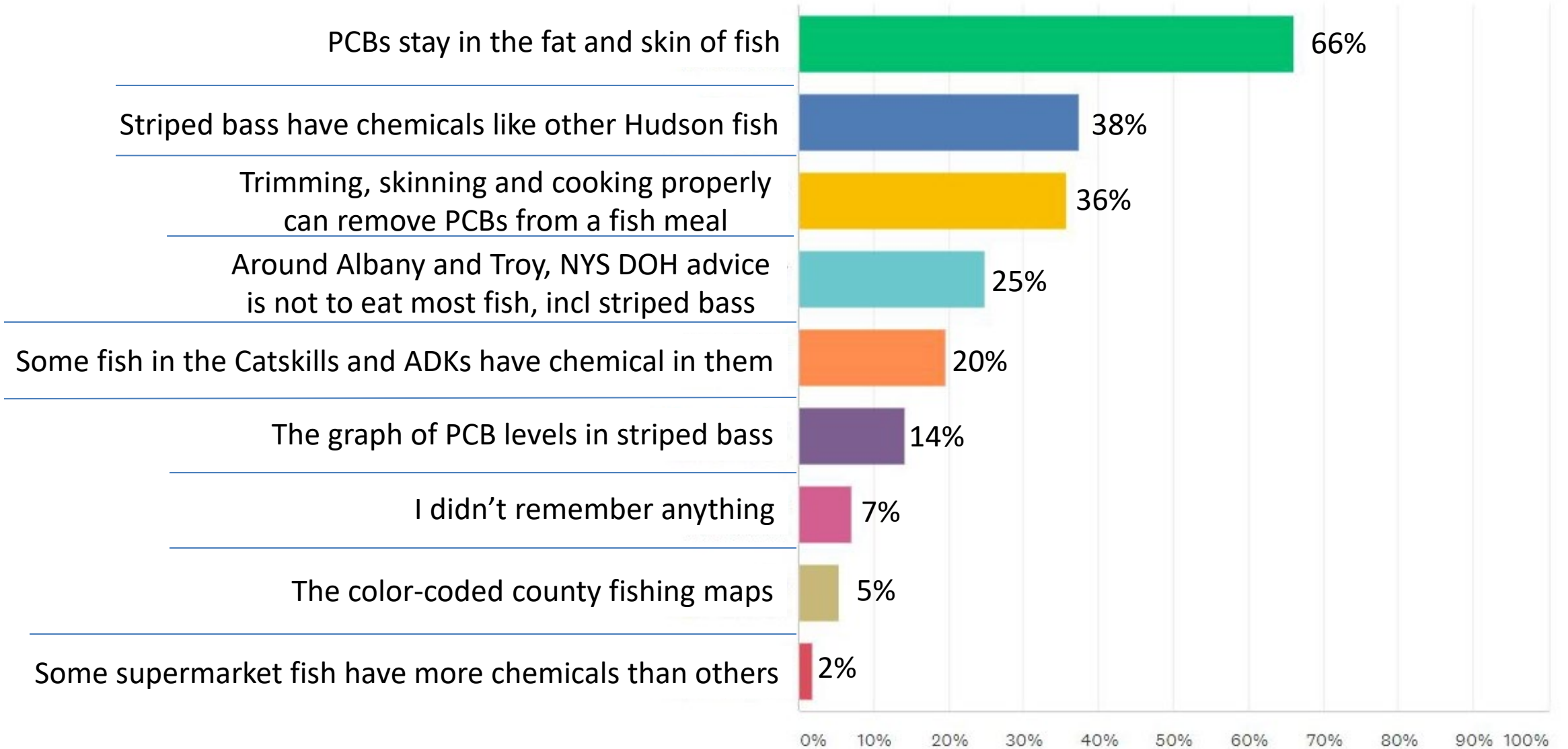
What are the best reasons for eating fish or crabs that you catch? (check all that apply) (n= 532)

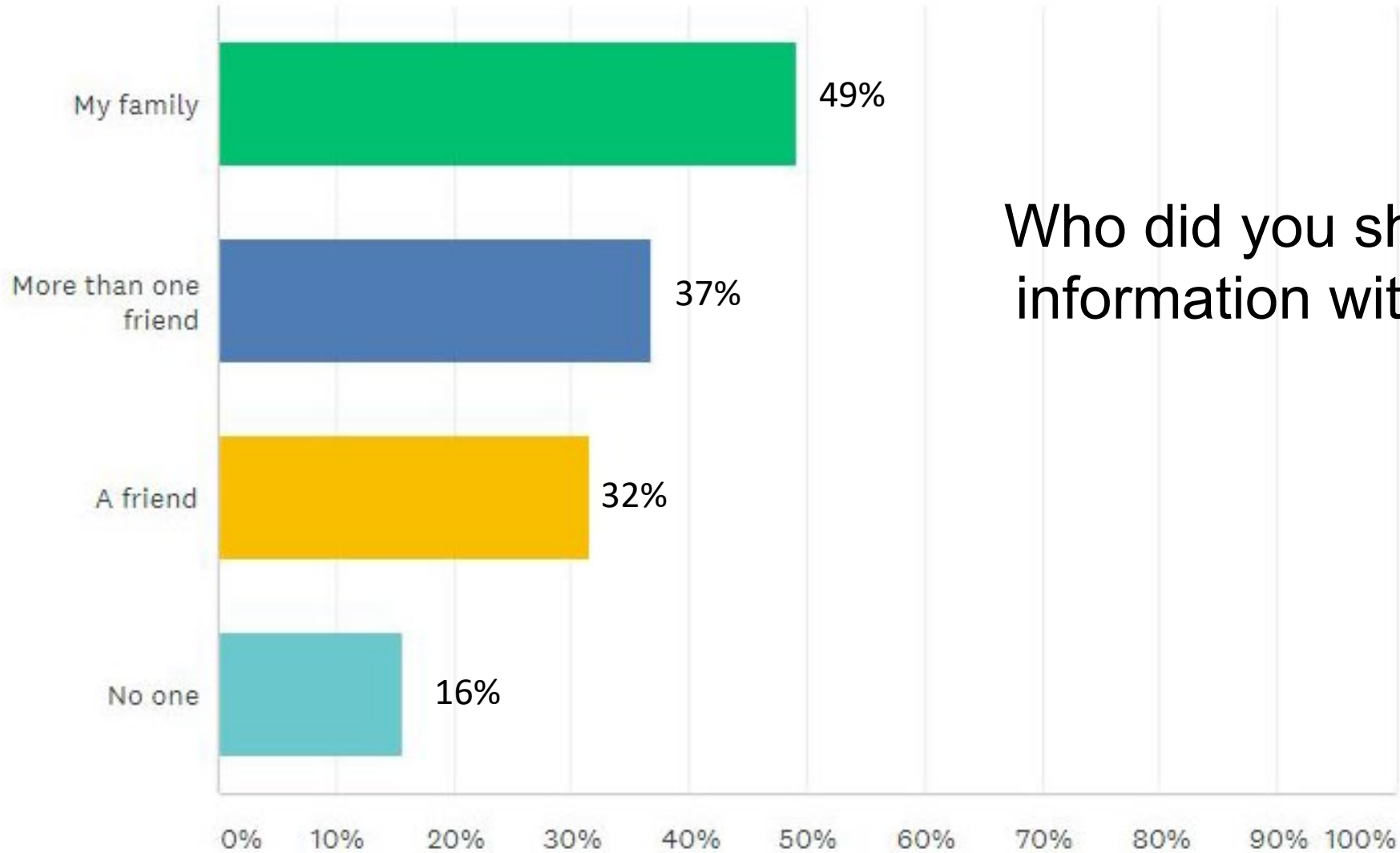
Return Surveys – Working Towards Measuring Behavior Change



Since reading the material or speaking with staff: (n=57)

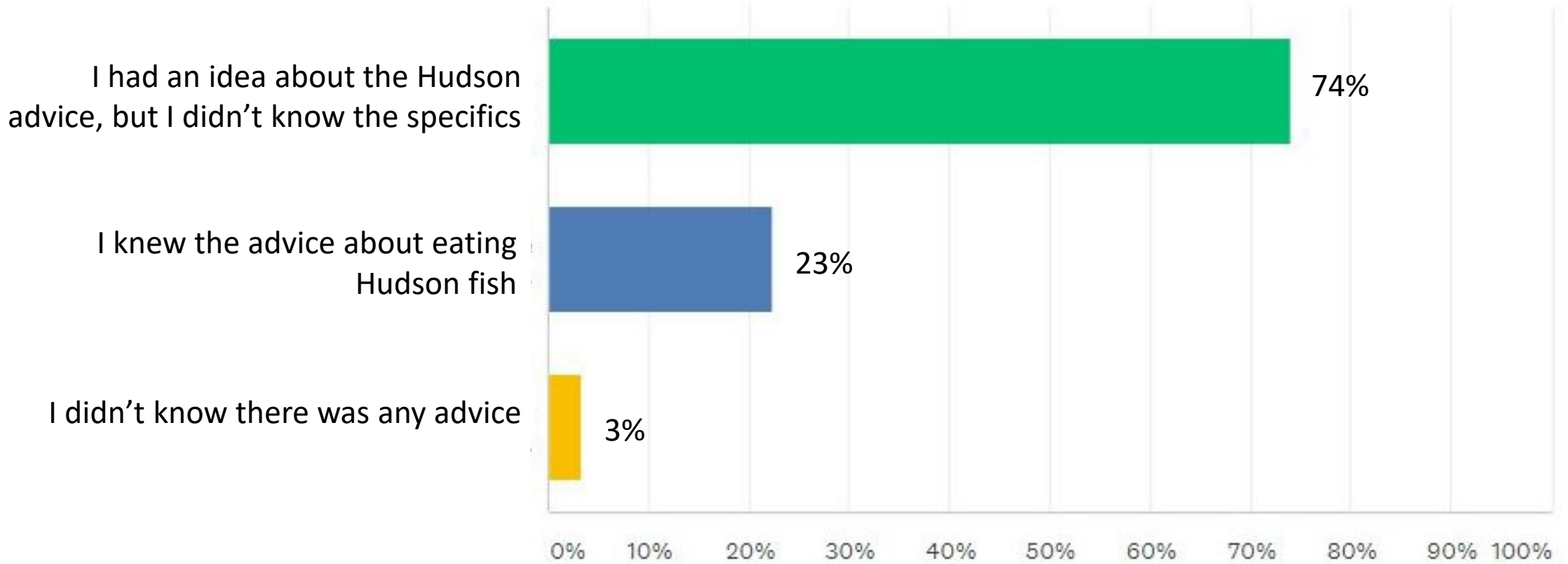
What is something you remember reading or from talking to us? (n=56)





Who did you share the information with? (57)

Before I saw the materials or talked to NYS DOH: (n=58)

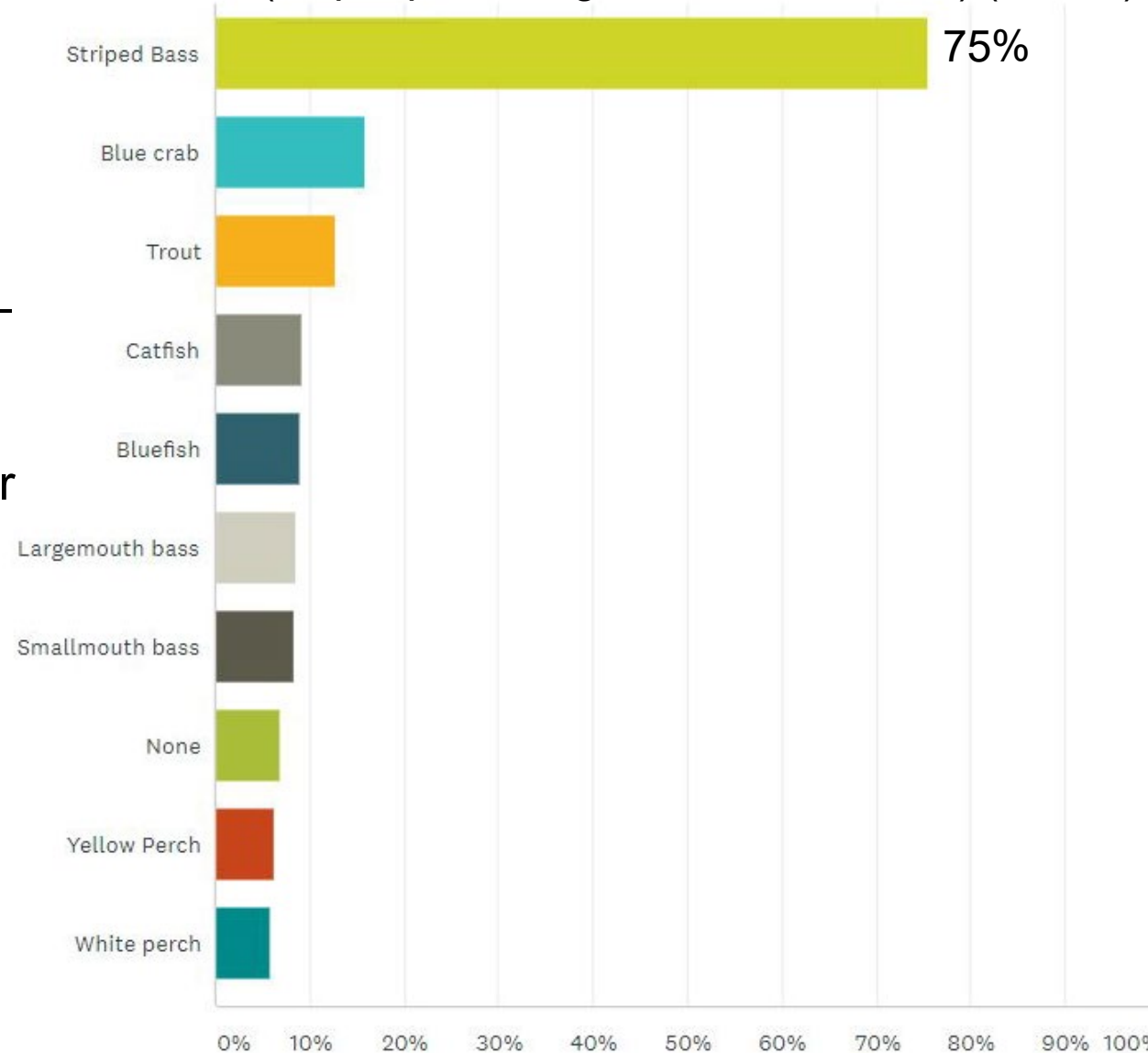


A Special Focus: Striped Bass

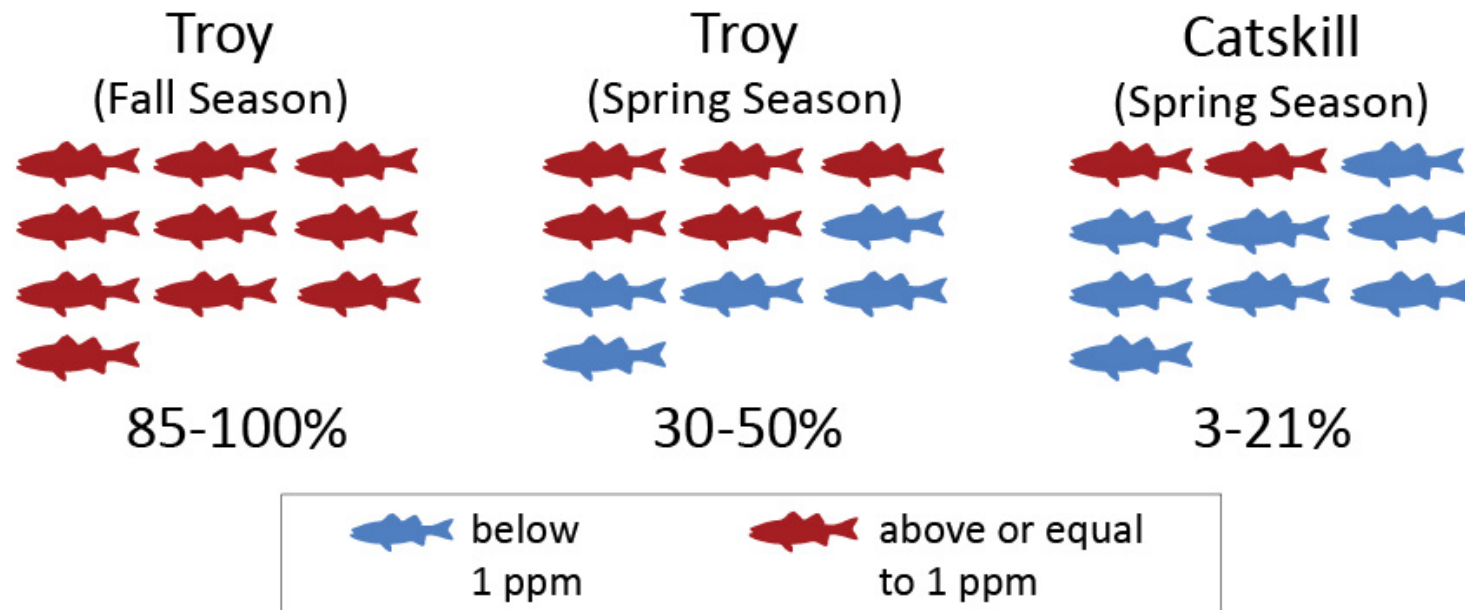
A Focus on Striped Bass Anglers Emerges

- Many people feel Hudson River fish advisories for striped bass don't apply – believe they are “ocean fish”
- There are no alternative local waters for striped bass, as there are for catfish and walleye (other “don't eat” fish)
- In 2019 NYS DOH posted an in-depth “striped bass packet,” which features PCB data to increase awareness of the advisory

What fish do you most frequently eat from the Hudson River? (Of people eating Hudson River fish) (n=820)

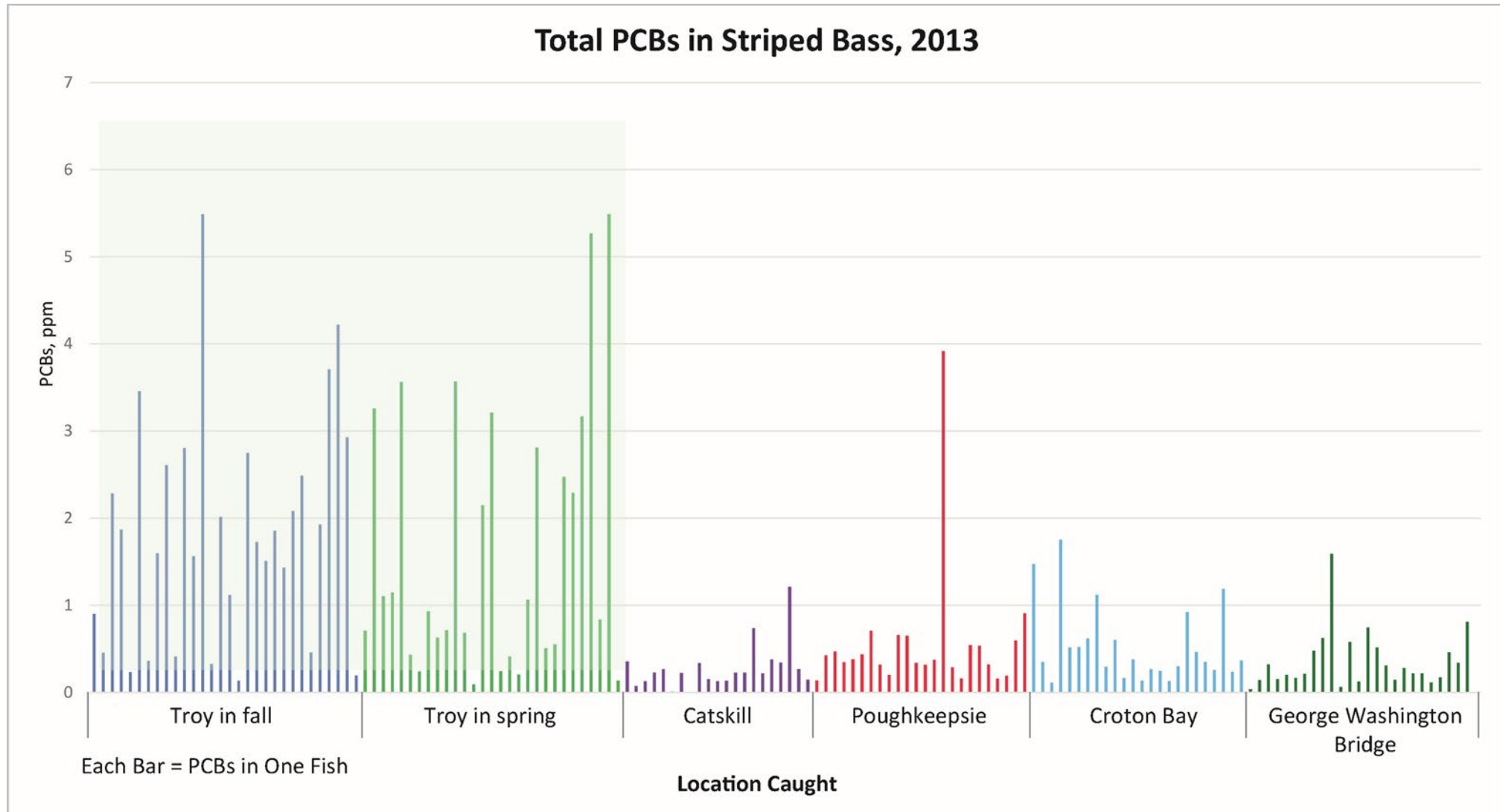


What are the chances of catching a striped bass with more than 1 part per million (ppm) PCBs?



This graphic represents the percentage of striped bass that exceed 1 ppm (part per million) of PCBs sampled in the Hudson River at Troy and Catskill in any given year **between 2007 and 2015**. One ppm is a health protective guideline used by NYS DOH for setting PCB based fish advisories. Check out the striped bass packet for more details and a “deeper dive” into the data.

Large Variations in Individual Striped Bass PCB Levels Are the Norm in Fish Caught Between Troy and Catskill



Media Campaign Planned for Spring ~~2020~~ 2021

COVID derailed original plans...



www.health.ny.gov/fish/stripedbass.htm



Moving Forward

- Continue expanding partner networks – especially in Newburgh, Poughkeepsie, and Westchester County
- Reinforce advice for striped bass caught around the Capital District
- Continue working with immigrant and minority communities to increase awareness and refine outreach tools
- Continue working with our NYC partners to reach Hudson River fish consumers in NYC

Questions?

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For more information about the project:
www.health.ny.gov/hudsonriverfish

Striped Bass info:
www.health.ny.gov/fish/strippedbass.htm

