

LOOKING BENEATH
THE SURFACE OF
PUBLIC PERCEPTIONS
ABOUT FISH

Lessons from Maine to Alaska



FLASHBACK TO
MY SURVEY OF
MAINE
RESIDENTS:



MAINE CASE STUDY



Study goal



Identify methods to better communicate the plight of Atlantic Salmon to a broad public audience in the species' final U.S. foothold.

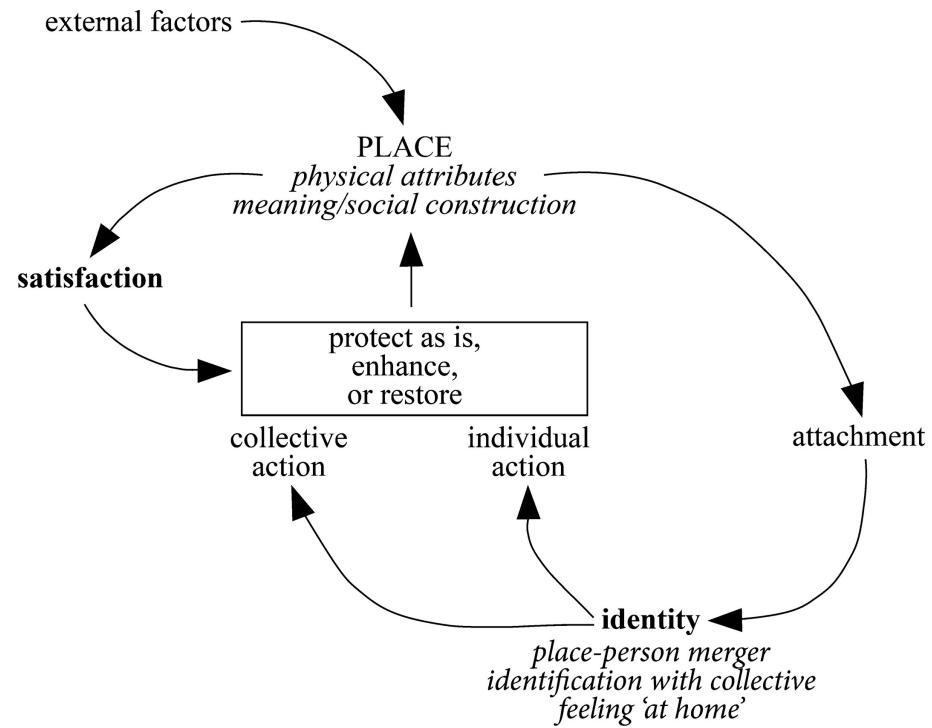
Exploratory interviews uncovered some false assumptions (as of ~2005):

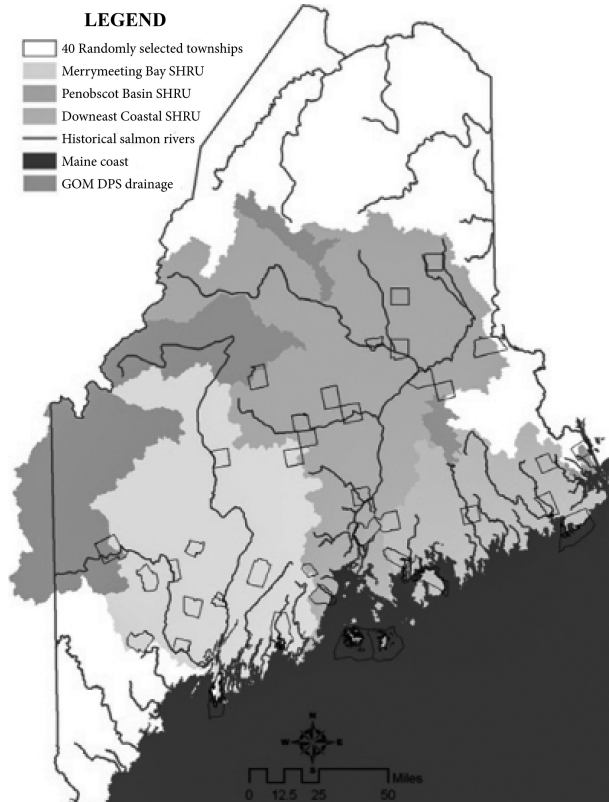
1. Wild Atlantic Salmon are tangible to the public and can be effectively be used to motivate broad support for their recovery.
2. Watersheds are a relevant boundary within which to engage the public in activities benefiting salmon.

*Informed by exploratory interviews ahead of survey

What *does* motivate action on behalf of something? (like a fish or a place where that fish lives?)

- Relevance is key! Does it exist already or do you need to create/recreate it?
- **Attachment:** if you're attached to something/have a connection, you're more likely to act on its behalf.
 - To what degree are people attached to the contemporary fish community? To native diadromous fishes? How about waterbodies? Impounded systems?
- Likewise if what you're attached to is **threatened/you're dissatisfied**, you're also more likely to act...





Survey distribution/ study area:

- Bounded by Gulf of Maine/Atlantic salmon's historical freshwater range.
- 40 randomly-selected organized townships therein.

-
- *(Also surveyed active members of salmon clubs, watershed councils, land trusts to compare)*

Attachment to self-defined “home turf” waterbodies

◦75% felt strongly that waters served as an “**escape**” from day-to-day stressors.

◦For 80% of respondents, waterbodies most important as point of contact with natural world.

Examples of respondent interactions with waterbodies

“Gazing, usually; I am affected by it in many indirect ways; I play by it occasionally”

—21-year-old Bar Harbor female

“Cross it and drive along it every day. I can also hear it from home. I watch the tides come and go”

—36-year-old East Machias male

“I work on it...trying to make a living from it...enjoy just being around it and in it”

—51-year-old Whitneyville male

“Go to the town pier every day without fail: my husband's ashes are out there”

—58-year-old Bar Harbor woman

“Watch it, walk near it”—49-year-old Farmingdale woman

“Everyday I walk it, I see it every day, I look out my window and see it, my kid and I look at boats, trains, the bridge and sometimes look for crabs”

—24-year-old Bucksport female

“Viewing while passing through [car], swimming”

—61-year-old Casco male

“Hunting, fishing, canoeing - some combination thereof”

—22-year-old Bangor man

“Walk around it, look at it, listen to it, watch the birds that are attracted to it...”

—61-year-old Cherryfield woman

“We have a summer cottage on the shore. Have been here since 1963 summers”

How satisfied are you with its...	% satisfied	% unsatisfied
...outdoor recreational opportunities?	79.6	8.3
...public accessibility?	71.9	9.3
...ability to support animals and plants you value?	72.0	10.6
...water quality?	63.8	14.1
...overall health?	60.1	15.1
...surrounding development?	40.2	30.4

Table. Percentage of respondents that were satisfied (i.e., chose 4–5 on the 5-point scale) or unsatisfied (i.e., chose 1–2 on the 5-point scale) with various attributes of the water body or water bodies they valued most in their home turf (results are combined for both public and targeted respondents)

Satisfaction with home turf waterbodies

(focus where there is dissatisfaction)

What most threatens to degrade what you value?

Encroachment

Social intrusion by humans and structures

Noise

Cluttered view/too many lobster traps

Ugly houses that don't adopt the traditional aesthetic and stick out

Cutting of trees...tree canopy feels protective; absence makes me feel exposed

Too many camps and people polluting it. When I was a kid you could stand on a rock in the lake with no slime on it. Now you slide right off

Development/sprawl

Too many jet skis and ATVs

Too many houses around it

People leaving trash in public water access areas

Humans

Second home development

Threats to
waterbodies
as "escapes"

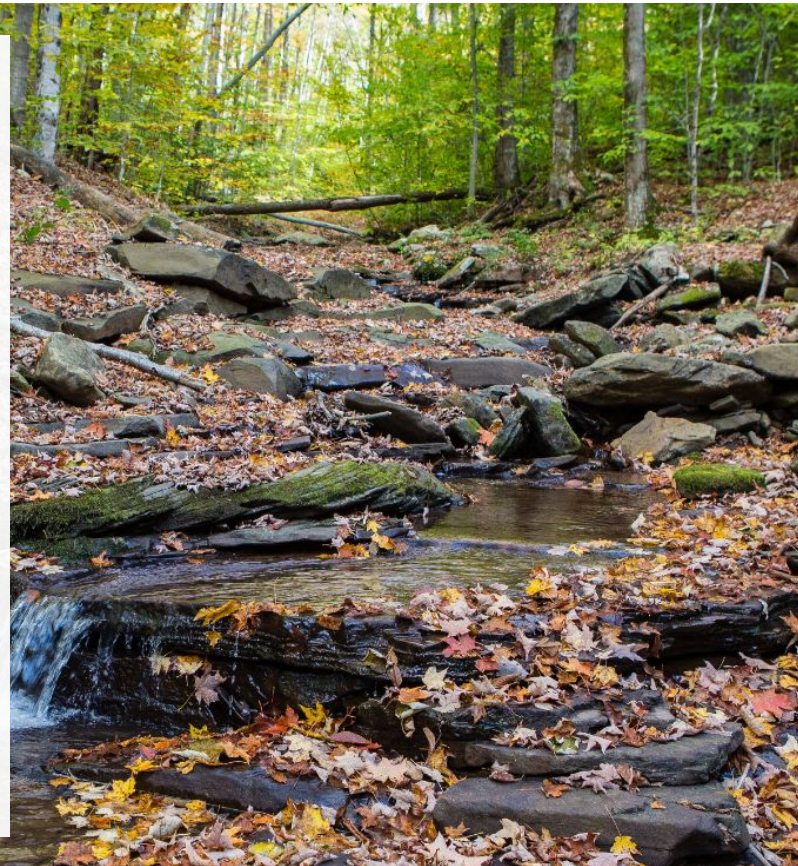
Fish and threats they face are inconspicuous to the layperson

- Largely invisible unless catching/eating
- Nearly 90% of public respondents identified mammals and birds as most contributing to their home turf's character, **only 3% identified fish as such.**
 - *mostly visible, charismatic megafauna: whitetail deer, moose, turkeys, eagles, ospreys*



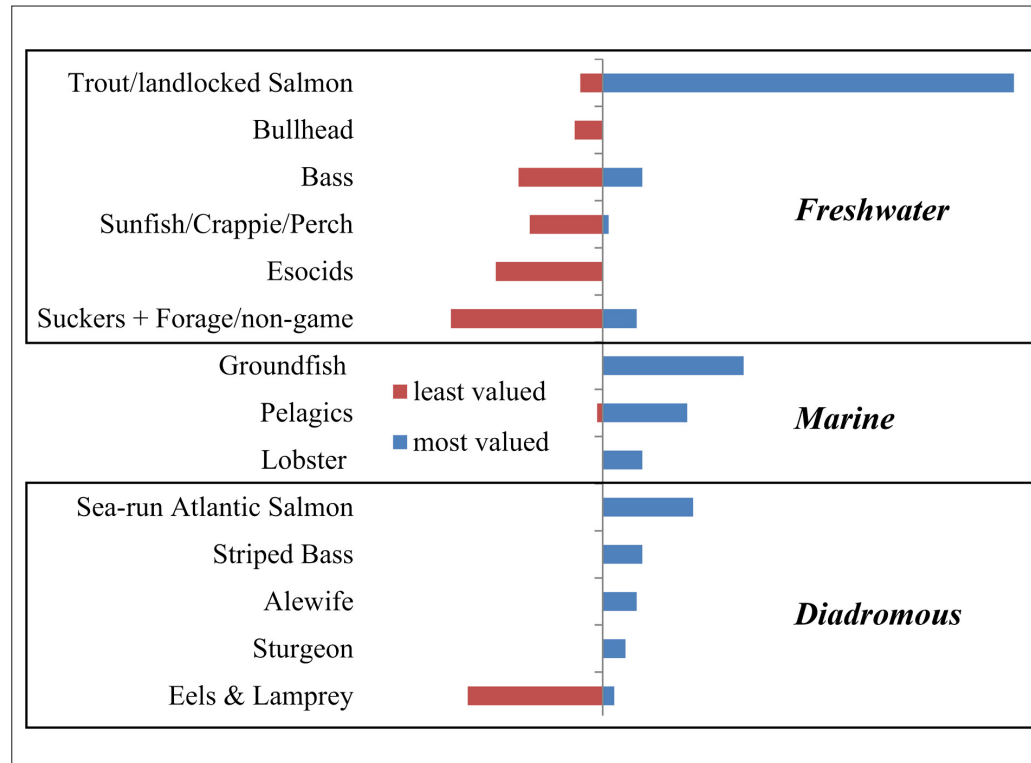
Fish and threats they face are inconspicuous to the layperson

- Generally, fish did not play an important role in residents' attachment to or satisfaction with home turf water bodies or in a water body's ability to provide an escape.
- Even for anglers, one of most important aspects was immersion in place (particularly forested/mountain streams where Brook Trout were found).

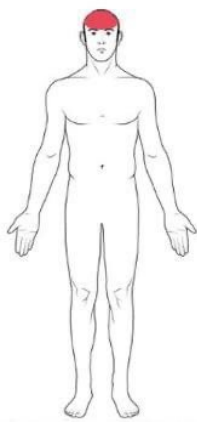


Relative value of fish

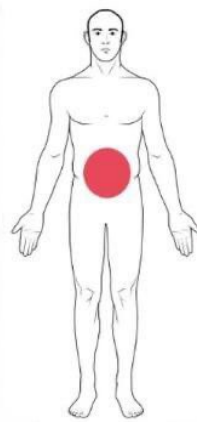
- **Figure.** Relative value of resident, marine, and diadromous fishes (general public). Blue bars represent positive respondent opinions on species, and red bars represent unfavorable opinions about the species.



where does it hurt



Headache

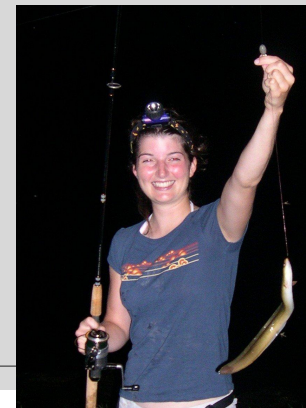
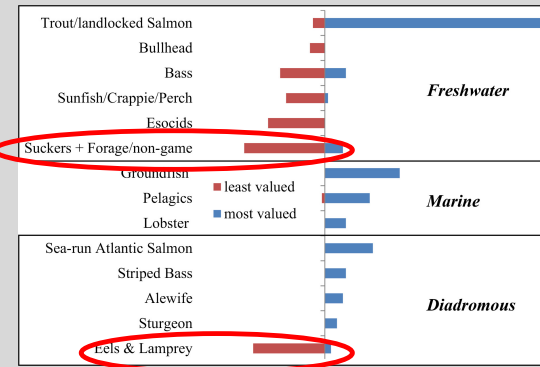


Stomach ache



When someone says fishes are icky

imgflip.com



Fighting shifting baselines

- Inter-generational amnesia causes each passing generation to forget prior conditions and normalize current conditions.
- This phenomenon is present in fisheries and can center on the reduced expectations of fisheries productivity with each passing generation

Shifting baselines: fish community



- Native diadromous fishes have declined over a long period of time & non-native/resident fishes well-established

*informal personal survey of fishing opportunities with friends

Shifting baselines: habitat

- Wholesale change to aquatic habitats (free-flowing to impounded) over several centuries
- Average respondent (slightly over 50 years) grew up when industry on rivers and associated pollution were extensive and obvious by sight and smell. For older generations, this shaped the baseline against which they measure contemporary conditions and base their satisfaction.
- Functional impacts of historic log driving and past forest and agricultural practices on fish habitat are still very much at play but are not visible to lay people.

Food for thought: be relevant!

- Build on waterbodies as escapes and how habitat restoration/species recovery ties in
 - Growing body of literature shows even short exposure to natural settings has mental health benefits
 - Escape from built environment = market experience around nature-like fish ramps?
- Make native fish more visible /viewing opportunities
- Remember high attachment/low satisfaction = increased likelihood to act. Play to Mainers' attachment to place, and how they can turn their dissatisfaction with development/pollution into action that ties to recovery efforts.

ALASKA





Eulachon

First Nations people called eulachon "**salvation**" **fish** because the return of spawning runs to coastal rivers meant the difference between life and starvation after a hard winter.





Respect

- “And you're supposed to go "p-o-o-o-o-o-o-". And that's a sign of respect for the hooligans. They're said to be a happy fish. Show your respect, and that you're happy they're there.”
- “It's really good to give them a day or so when they first start going up. They [the fish] see the scouts or go up first.” It's easy to get excited – there are fish everywhere, they're easy to catch. It's good to take step back when they're first showing up, let them get established.

*Quotes from Fish of the Week! Eulachon podcast episode (Ted Hart)



Sheefish

Biggest of Alaska's whitefish

Northwest Alaska

Iñupiat communities

Year-round availability





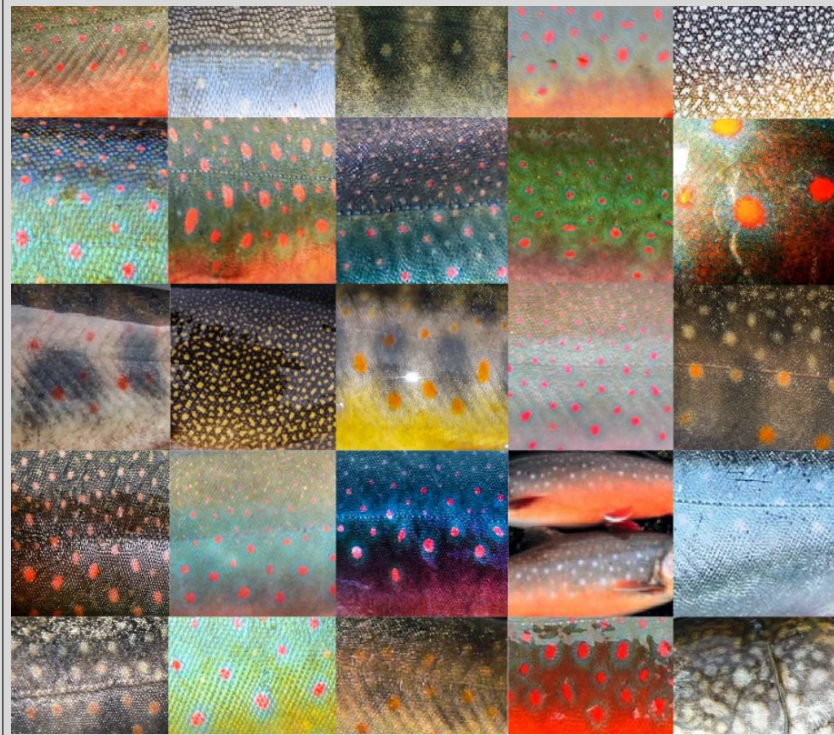




STRATEGIES

Strategies

- Show the fish!



USFWS Alaska Fisheries and Habitat ...
Published by Katrina Liebich
January 6, 2018

We're seeing spots. In the char department. Alaska is not too shabby (find char on all 16 of our National Wildlife Refuges!)

Edit

401 253 Comments 389 Shares

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Most relevant

USFWS Alaska Fisheries and Habitat
Mark Rusnov you're our lucky winner! Message us if you'd like to claim your prize
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Roy Schoppert
"Something looks a little fishy!"
Like · Reply · Hide · 4y · 1

Kelli McCollum
Very Cool...almost like a Jackson Pollock print!
Like · Reply · Hide · 4y · 1

Patricia Phillips
Pink chars on parade! Here they come! Flippity flopi! Here and there, splashing everywhere!
Like · Reply · Hide · 4y · 1

Tonya Anderson
I think my husband David Anderson see this in his head at all times
Like · Reply · Hide · 3y · 1

Corie Berrigan
It's gorgeous & would look fabulous above my fireplace
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Strategies

- Show the fish!
- Lift up diverse voices who can speak to and normalize deep connections with fish



Strategies

- Show the fish!
- Lift up diverse voices who can speak to and normalize deep connections with fish
- Marry social media to in-depth evergreen content



 **USFWS Alaska Fisheries and Habitat** ...
Published by Hootsuite · June 21, 2021 ·

Birds-eye view of Sockeye Salmon amassing where a stream enters a lake in the Bristol Bay region of #Alaska. 📸 Jeff Jones

This Monday and next, 🎧 all new 2-part episode featuring Native Liaison for U.S. Fish and Wildlife Service/retired Bristol Bay fisherman(Orville Lind) and salmon scientist (Daniel Schindler) on "Fish of the Week!" <http://ow.ly/wbhg50FeAm7> (or wherever you get podcasts)

#AllTheFish #WildlifeRefuge

Edit

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Most relevant ▾

 **Mark HudAK**
Nice gills up! Fill up the boat ...
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 **Jason Lichtenberg** ...

Like · Reply · Hide · 28w 1

 **Marissa Mowitch**
This is so awesome to see! ...
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 **Alice Neal**
Wow awesome! ...

ALL THE FISH

Back to School

New culvert to benefit future generations of fish, Southeast Alaskans

 U.S.Fish&Wildlife Alaska Sep 10, 2021 · 5 min read



Strategies

- Show the fish!
- Lift up diverse voices who can speak to and normalize deep connections with fish
- Marry social media to in-depth evergreen content
- Experiment, and learn about what people think



 **USFWS Alaska Fisheries and Habitat**
Published by Katrina Liebich ·
November 8, 2017 · 🌐


Give us "one word" to describe Alaska's underwater gem, the Arctic Grayling. We'll randomly select a commenter for a prize on Friday. Photo by USFWS/Ryan Hagerty

Edit

👍❤️ 262 197 Comments 45 S

👍 Like 💬 Comment ➦ Sh

Most releva

 Author
USFWS Alaska Fisheries and Habitat
This was fun. Maybe we'll make a word cloud for each of Alaska's fish 🤖
👉 **Stephen Arturo Greenlaw #15** is our lucky number today so message us an address if you'd like to claim a prize.

Like · Reply · 4y 🗨️ 10


 **Chris Richardson** · ...
My little lady




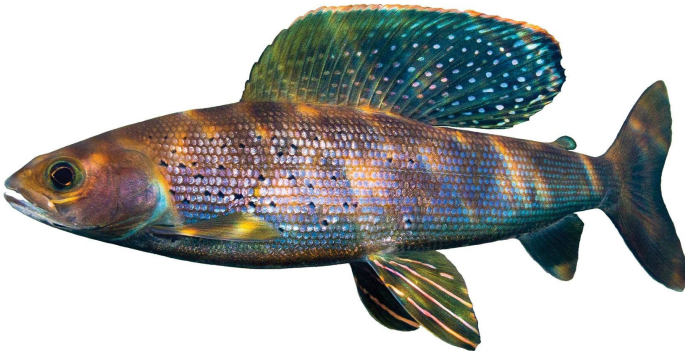
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 Author
USFWS Alaska Fisheries and Habitat
Beautiful!

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 **Hans Fredhult** · ...

 Write a comment... 🗨️ 📷 📧



Magnificent Delicious Steady Streamlined NorSail
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Pearlescent Dreamy Peacock Gray Mahank Cool Fluid Fish Showy Arctical
Exquisite Bucketlist Feisty Iridescent Polychromatic Rainbow Starburst Bestfishever
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Mercurial Nyaniglunii Charismatic Kumlanag Resplendent Awesome Lustrous Sapphires Beautysail
Gray-eful Dryflyperfection IneedtoatchoneomyDwt Sublime Captivating



Powerful **Piscivorous** **Ferocious** **Assassin** **Striking** **Torpedo** **Boothy**
Delicious **Adaptive** **Alpha** **Underated** **Fond** **Teeth** **Fierce** **Hard-handed** **Misunderstood**
Invasive **Exciting** **Hammer** **Stickball** **Problem** **Tomahawk** **Yamoose** **Duckbilled** **Steady** **Prehistoric**
Apex **Sleek** **Bitey** **Swift** **Savage** **Badass** **Cuda** **Sharp** **Majestic** **Fun** **ESOX** **Terminator**
Voracious **Wolf** **Fearless** **Vicious** **Jerk** **Fighter** **Pointy** **Sturdy** **Red-October** **Scandalous** **Topwater**
Awesome **Beautiful** **Slimy** **Bony** **Lucius** **Watchful** **Viscarot** **Snaky** **Huge** **Lumber** **Dried-and-eaten-with-seal-oil**
Aggressive **Tasty** **Striker** **Stalker** **Alien** **Pickled** **Explosive** **Snack** **Conflicted** **Cannibalistic**
Killer **Sagittiform** **Alligator** **Yummy** **Opportunistic** **Superpredator** **Supercolligilisticxpiplidaceous**

drinks-like-a-fish nerdy survivability-specialist
devoted coffee-drinker underappreciated
super-sexy-dreamboat creative ichthyologist superhero
animal-lover fish-potter mybrother protector peer-reviewed
warm-heart reports stewards mydad fish-head
cold-hands unemployed guru wet
fish-whisperer fishnerd data passionate caretaker
distant hope paperwork manuscripts teaching forward-thinking
fish-squeezer vital sexy smart
someday truth-teller scoliosis
powerpoints
fun
ambassador
guardians fieldwork amazing crazy
Jacques-Cousteau beard dedicated fisherman happy
great awesome teacher underpaid funnyhats
saving-nature
hard-studying watchdog scales-under-nails quiet studies
20-year-old-pickup-truck keeper fish-doctor fish-midwife
someone-who's-actually-interesting caretaker bestjobever appreciated intelligent
fish-massage-specialist scientist-from-below outdoor-office
conservationist fish-midwife overworked



Questions?