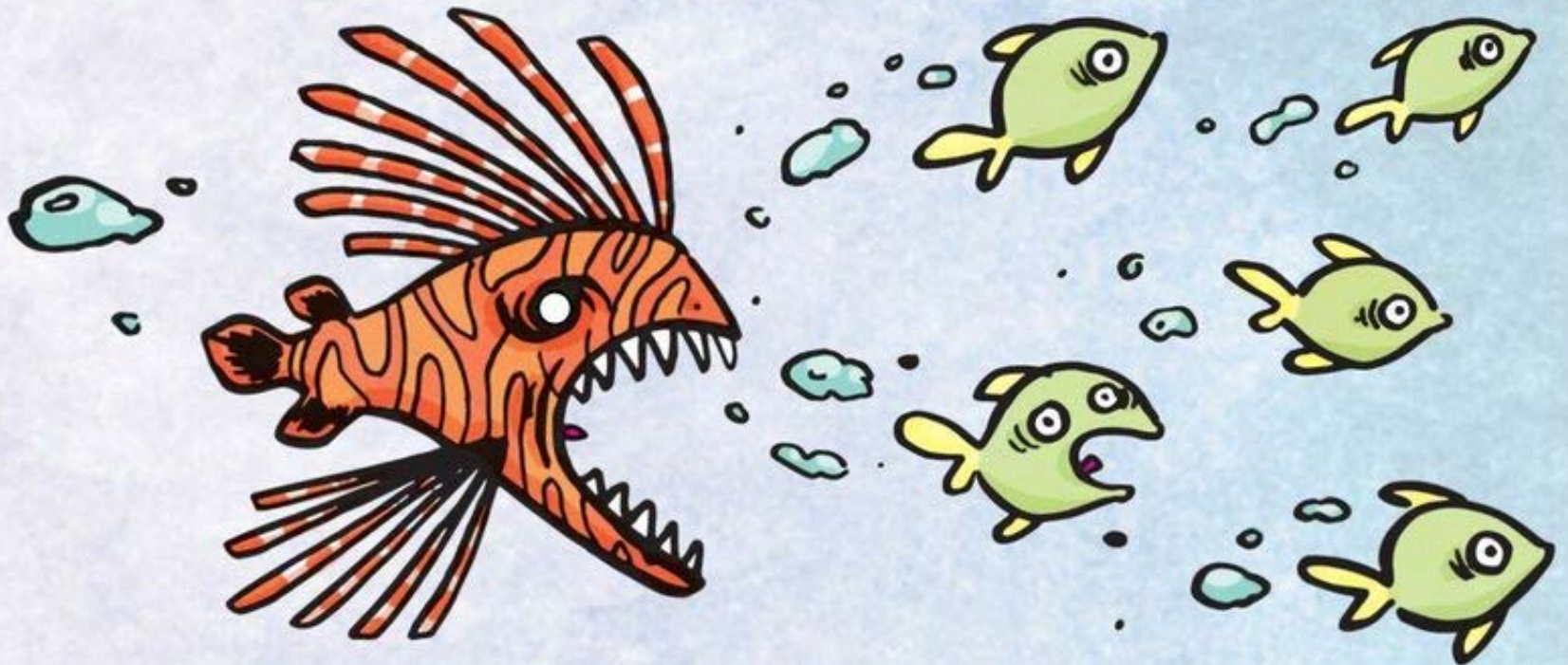


# DON'T LET YOUR PETS BECOME PESTS.



# Awareness Need

- Aquarium dumping introduces non-native fish and plants into
  - Coastal waters (ocean, bays, estuaries)
  - Inland waters (rivers, lakes)
- Many dumped species are invasive and can outcompete native species and harm our ecosystems
- First line of defense is prevention
- Several species already frequently found in Texas waters



# Campaign Goals



Prevent introduction and spread of aquatic invasive species in order to help preserve native Texas marine ecosystems.



Create awareness of impacts of dumping aquarium fish, animals and plants



Inform aquarists of alternatives to dumping their tanks, via information provided on:  
[www.TexasInvasives.org/NeverDumpYourTank](http://www.TexasInvasives.org/NeverDumpYourTank)

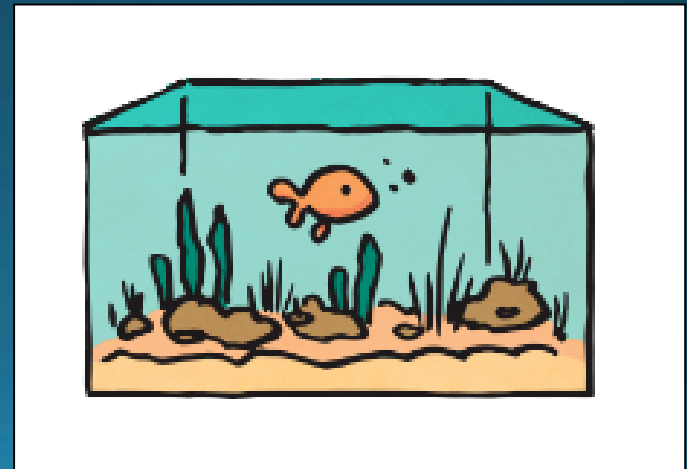
# Campaign Messaging

- Call to action: Never Dump Your Tank
- There are alternatives to releasing pets back “into the wild”
- Humane euthanasia is a better option than release
- Messaging must consider (per HARC research):
  - Many fish are beloved pets, and may even be considered family
  - Disconnect between knowledge and values



# Target Audience

- Primary: Aquarium Owners
  - Coastal Areas: Harlingen, Corpus Christi, Victoria, Houston & Beaumont
  - Ages: 18 to 60 years old
- Secondary: Aquarium Stores & Pet Superstores
  - Uniquely positioned to increase awareness
  - May be able to offer to take back aquarium pets & plants



# Marketing Tactics

Website

Print Ad

Direct Mail

Social  
Media

Vinyl  
Banners

Posters

Digital  
Advertising

Billboards

Vehicle  
Magnets





# Texas Invasives Website

[www.TexasInvasives.org/NeverDumpYourTank](http://www.TexasInvasives.org/NeverDumpYourTank)

**TEXASINVASIVES.ORG**

HELLO INVASIVE SPECIES.  
GOODBYE TEXAS.

ABOUT | IWIRE | SPOTLIGHT | CONTACT | ESPAÑOL

INVASIVES 101 | TAKE ACTION | CITIZEN SCIENTISTS | PROFESSIONALS | RESOURCES

INVASIVES  
DATABASE  
GO 

## DON'T LET YOUR PETS BECOME PESTS.



## NEVER DUMP YOUR AQUARIUM.



Dumping anything out of an aquarium—fish, animals, and plants—can have devastating consequences for Texas' natural waterbodies. This is true for both freshwater and saltwater aquariums. Never dump them into a natural body of water or flush them down the toilet.

# Texas Invasives Website



## THE NEXT INVASIVE SPECIES COULD COME FROM YOUR AQUARIUM.

Your aquarium fish, animals and plants are likely not native to Texas. This makes them an invasive species. When they're dumped into the wild they can introduce disease or become serious predators, killing off local fish colonies, and damaging reefs and vegetation that keep our underwater ecosystem alive and healthy.



## THE LIONFISH INVASION

What started as a beautiful pet is wreaking havoc on our coastal ecosystem. Lionfish are from the West Pacific Ocean and don't belong here. They are believed to have been released in Florida by unsuspecting aquarium owners and have been spreading rapidly since. This aggressive and venomous fish can grow up to 19 inches long and has no natural predators here. It has become a major pest causing enormous ecological and economic damage. This invasion has reduced the number of local fish like juvenile grouper and snapper, shrimp and crab species. They can also completely strip reefs. If you see one, report it immediately.

[See the whole story on how the Lionfish has become a threat.](#)

**Report a Lionfish**



# Texas Invasives Website

## THE PLECOSTOMUS, A FRESH WATER INVADER

Also known as a “suckermouth”, “algae eater” or “armored catfish”, the plecostomus is another example of an aquarium fish that was released into the wild and has grown out of control. They are voracious consumers of aquatic plants and wood, and contribute significantly to erosion in areas of infestation. They also create deep burrows under banks, which cause undercutting and bank collapse. What seems harmless in your tank can be a major threat to the ecosystem outside of it.



*In the aquarium.*



*Released in the wild.*

# Texas Invasives Website

## RESPONSIBLE WAYS TO GET RID OF YOUR AQUARIUM LIFE

If you can't keep your aquarium fish, plants, or animals (snails, shrimp, etc.) anymore, there are responsible alternatives to get rid of them. Plants can be thrown away in the trash, but you'll need to dispose of your fish and animals more thoughtfully.



### FIND A NEW FAMILY FOR YOUR FISH

If your fish is healthy, try to find it a new home. You can give it away to a friend with an aquarium, or maybe even the store you bought it from. You can also donate your fish to a school, business or another aquarium hobbyist.



### SELL OR TRADE YOUR FISH

Check around on aquarium forums and blogs online, as someone may want to buy your fish to add to their aquarium, or you may even be able to trade it for something else.



### HUMANELY EUTHANIZE

If you can no longer care for your fish and cannot find them a new home, euthanasia might become an option. There are humane options for ending your fish's life.

[See your options](#)

# Instructional PDF

## DON'T LET YOUR PETS BECOME PESTS.

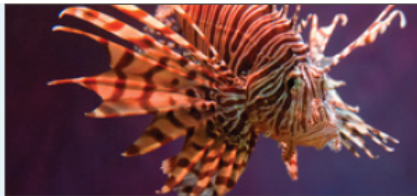


### NEVER DUMP YOUR UNWANTED AQUARIUM LIFE INTO THE WILD.



Your aquarium fish, animals and plants are likely not native to Texas. This makes them an invasive species. When they're dumped into the wild they can introduce disease or become serious predators, killing off local fish colonies and damaging reefs and vegetation that keep our underwater ecosystem alive and healthy.

Already, invasive species like the Lionfish and the Plecostomus are wreaking havoc on our aquatic ecosystems. We need your help in preventing the spread or introduction of new invasive species.



If you can't keep your aquarium fish, plants or animals anymore, consider these options to responsibly get rid of them.



### FIND A NEW FAMILY FOR YOUR FISH.

If your fish or aquatic animal is healthy, find it a new home. You can give it to a friend with an aquarium, or maybe even the store you bought it from. You can also donate your fish to a school, business or another aquarium hobbyist. Aquatic plants can be thrown in the trash.



### HUMANELY EUTHANIZE.

If you can no longer care for your fish and cannot find it a new home, euthanasia may be the best option. There are humane ways to end your fish's life. Never flush your fish. It's inhumane and hard on your plumbing, too.

#### Here are some responsible options:

**Option 1:** Prepare a euthanasia bath with the appropriate drug combination. You can use MS-22 or tricaine methanesulfonate, an FDA approved drug for fish euthanasia. It is sometimes called Finquel or Tricaine-S and can be bought at a pet store. An alternative to this is clove oil. Large doses of whichever chemical you choose will need to be added to a separate tank to ensure proper euthanasia.

- MS-22: Use 5-10 times the amount the label recommends for anesthesia. This is about 250-500mg/l.
- Clove oil: 13 drops per liter of water.



**Option 2:** Another alternative is to physically kill the fish. This may sound brutal, but it is quick and painless for your fish. To do it, decapitate the fish by holding its head down and quickly severing it from the body, just behind the skull. Then pith the brain immediately by inserting a sharp knife into the brain between the eyes. Do this quickly to ensure humane treatment. Larger fish might require the assistance of a veterinarian.



For more information, call Texas Parks and Wildlife Dept. at 512-389-4620 or email [cfish@tpwd.texas.gov](mailto:cfish@tpwd.texas.gov). You can also visit [texasinvasives.org/neverdumptyourtank](http://texasinvasives.org/neverdumptyourtank)

# TPWD Website

## Exotic and Invasive Species

### Lionfish FAQs

- What is a lionfish?
- Where did lionfish come from?
- What types of habitat do lionfish prefer?
- How common are they?
- What do lionfish eat? What eats lionfish?
- Why are lionfish bad for the environment?
- Are lionfish dangerous? What should I do if I am stung?
- What is being done to control invasive lionfish in the Gulf of Mexico?
- What should I do if I see a lionfish?
- More information on lionfish or other invasive species



#### What is a lionfish?

Lionfish are a small to medium sized reef fish (up to 19 inches) often found on hard structures such as oil rigs, shipwrecks, or jetties. They are reddish brown/white striped in color and possess large ornamental fins with venomous spines. They have a large head and mouth which, along with their cooperative hunting strategies makes them very effective predators of other fishes.

There are many species of lionfish, but the two that are responsible for the invasions in the Gulf are the red

the [Premium Private Lands Dove Hunts](#) – are August 1.

[Browse Hunts and Apply](#)

#### Fishing

### Neighborhood Fishin'



Catch your catfish close to home at Neighborhood Fishin' lakes and ponds. Help your kid hook a keeper!

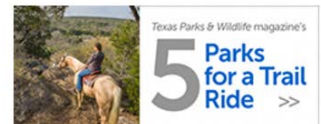
[Find a lake near you](#)

#### State Parks

### 5 Parks for a Trail Ride

#### Cost Efficiency Suggestion For

#### Spotlight on TPWD



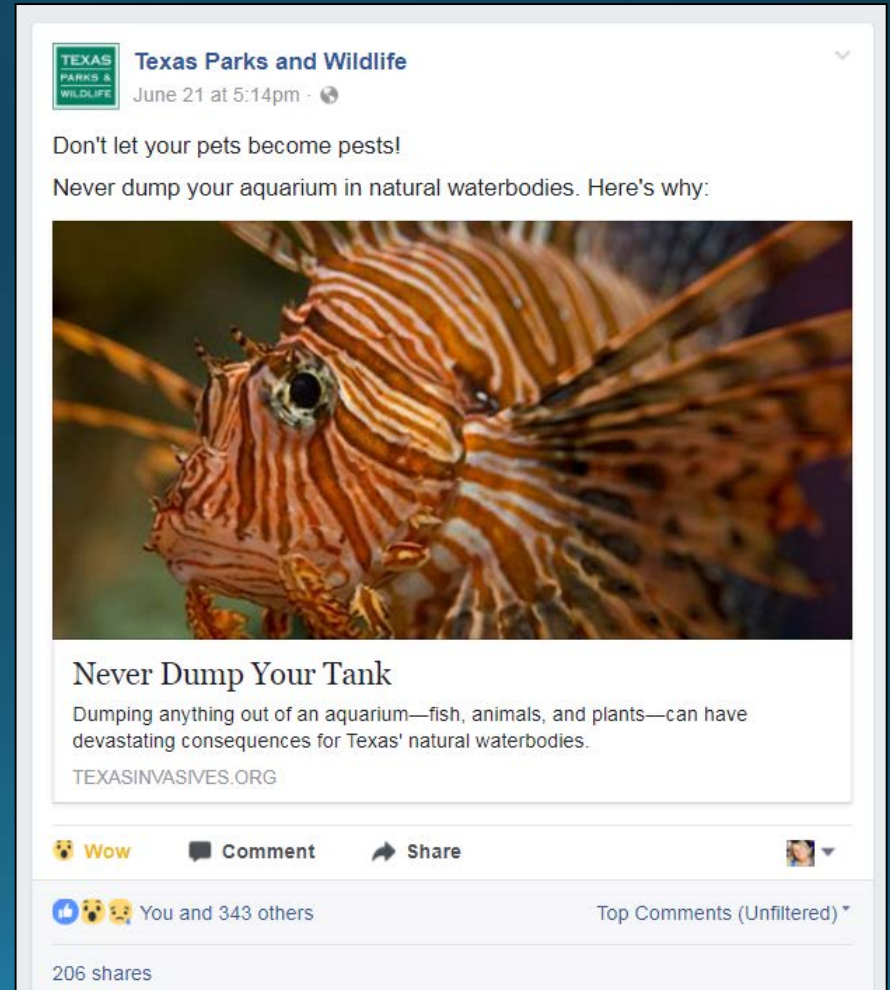
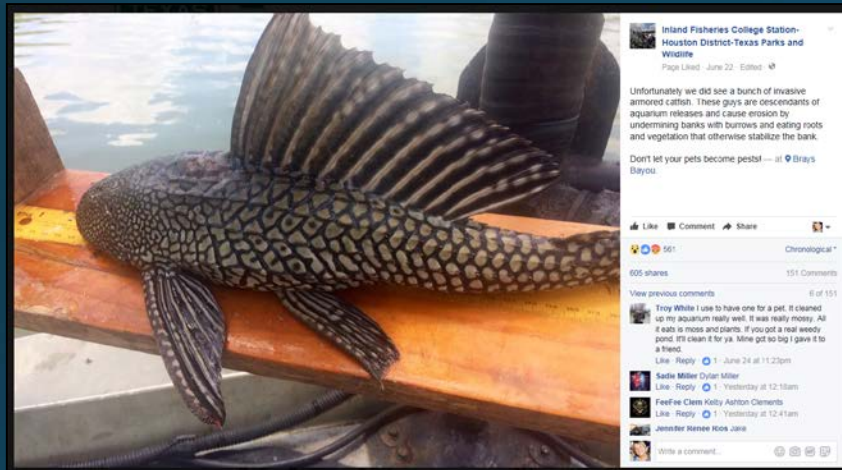
TPW Magazine Advertisers [Ad Info](#)



TEXAS  
PARKS &  
WILDLIFE




# TPWD Social Media Posts






# Facebook Newsfeed Ads

 **Texas Parks and Wildlife**  
Sponsored · 🌐


👍 ...

Your pet fish may be beloved family members. But, if they can no longer live at home and can't be given away, there are humane options.  
[#neverdumphyourtank](#)




**Never Dump Your Tank**  
Dumping anything out of an aquar...  
[texasinvasives.org/neverdumpyo...](http://texasinvasives.org/neverdumpyo...)

Learn More

 **Texas Parks and Wildlife**  
Sponsored · 🌐


👍 ...

The next invasive species may come from your aquarium! [#neverdumphyourtank](#)



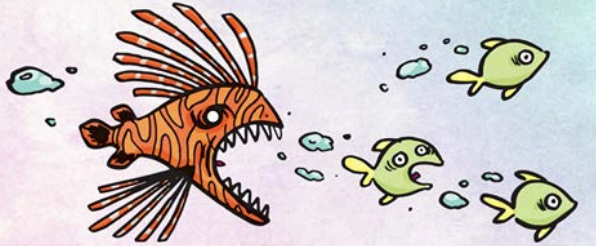
**Never Dump Your Tank**  
Dumping anything out of an aquar...  
[texasinvasives.org/neverdumpyo...](http://texasinvasives.org/neverdumpyo...)

Learn More

 **Texas Parks and Wildlife**  
Sponsored · 🌐

👍 Like Page

When dumped into the wild, your aquarium life could wreak havoc on Texas' natural waterbodies.



**YOUR CUTE LITTLE FISH MAY HAVE A DARK SIDE.**

Never dump an aquarium.  
Prevent the spread of invasives.

[HTTP://WWW.TEXASINVASIVES.ORG/NEVERDUMPHYOURTANK/](http://www.texasinvasives.org/neverdumphyourtank/)

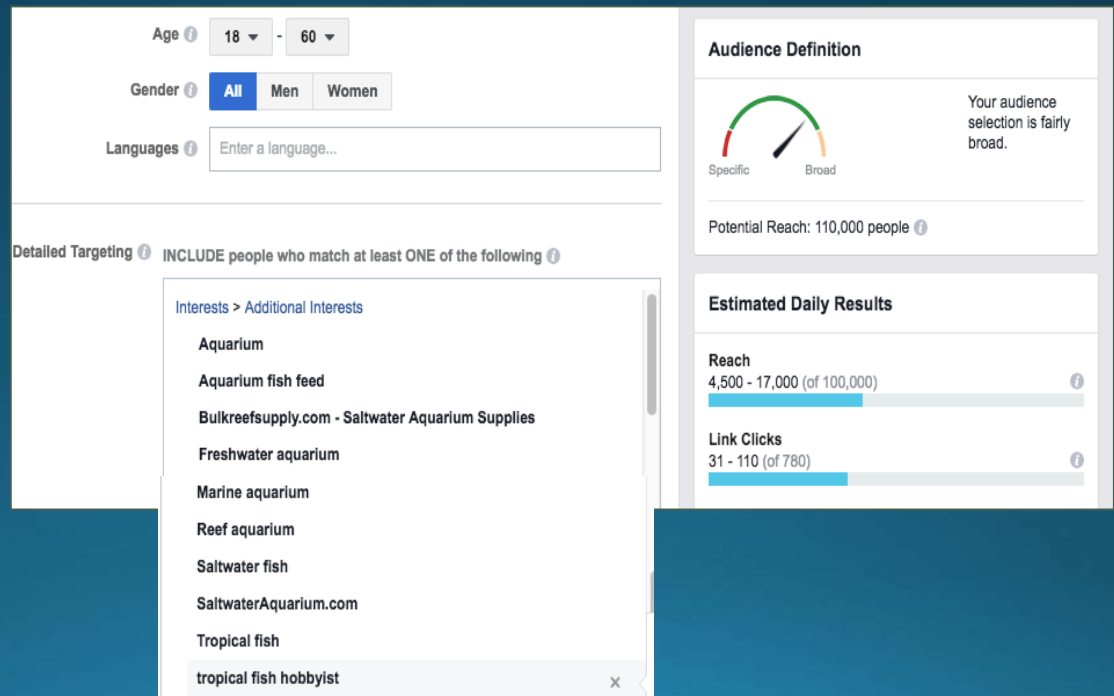
Learn More

7 Likes

👍 Like    💬 Comment    ➦ Share

# Facebook Ad Targeting Strategy

- Online and Mobile Facebook Ads – Detailed Targeting
  - Who: Ages 18 – 60, All Genders, Aquarium Interests
  - Where: Harlingen, Corpus Christi, Victoria, Houston & Beaumont
  - When: June – August 2017



# Other Digital Advertising

- Google AdWords: Paid Search Result



- Where: Harlingen, Corpus Christi, Victoria, Houston & Beaumont
- When: June – August 2017

Keyword
saltwater aquarium
live coral
saltwater aquarium supplies
buy saltwater fish
coral for tank
saltwater fish
saltwater fish tank
saltwater fish for sale
saltwater tank
saltwater aquarium fish
saltwater aquarium kit
saltwater fish tanks for sale
saltwater aquarium for sale
saltwater tank fish
saltwater tanks for sale
saltwater fish tank setup
saltwater coral
saltwater fish store

Keyword
freshwater exotic fish
freshwater tank
large freshwater aquarium fish
colorful freshwater fish
freshwater aquarium fish guide
freshwater fish stores
tropical freshwater aquarium
exotic freshwater aquarium fish
freshwater fish sale
freshwater aquarium supplies
freshwater fish tank fish
small freshwater aquarium fish
list of freshwater fish
freshwater fish for sale online
best freshwater aquarium fish
freshwater tropical fish sale
cool freshwater fish for sale
colorful freshwater fish for sale
live freshwater fish for sale online

Keyword
alternatives to dumping tank
aquatic invasives
donating fish
dump tank
euthanasia bath for fish
fish disposal
flush a fish
get rid of aquarium life
get rid of fish tank
get rid of my fish
give away my fish
how to dump aquarium
how to dump fish tank
how to empty aquarium
how to euthanize fish
how to get rid of my fish
how to kill fish humanely
How to kill your fish
how to prevent spread of invasive species

**Painful fish deaths? You might be guilty! – Practical Fishkeeping ...**  
[www.practicalfishkeeping.co.uk/blog/articles/painful-fish-deaths-you-might-be-guilty](http://www.practicalfishkeeping.co.uk/blog/articles/painful-fish-deaths-you-might-be-guilty) ▼  
 Jun 13, 2016 - Humanely destroying a fish is an inevitable part of keeping them in any numbers. Shocked by some advice being touted online, Nathan Hill ...

**Help Prevent Invasive Species - Never Dump Your Aquarium**  
 [Ad] [www.texasinvasives.org](http://www.texasinvasives.org)  
 Dumping your tank into the wild can spread invasive species. Learn more.

Searches related to how to euthanize a fish

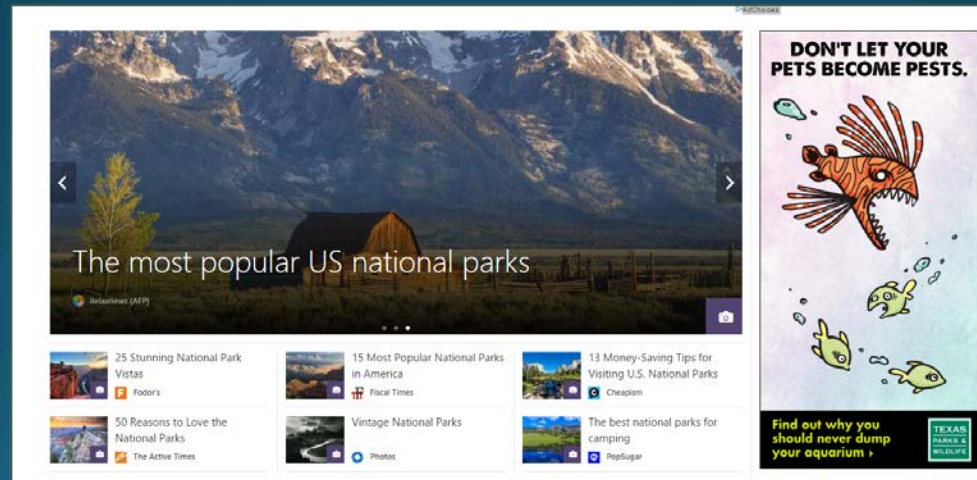
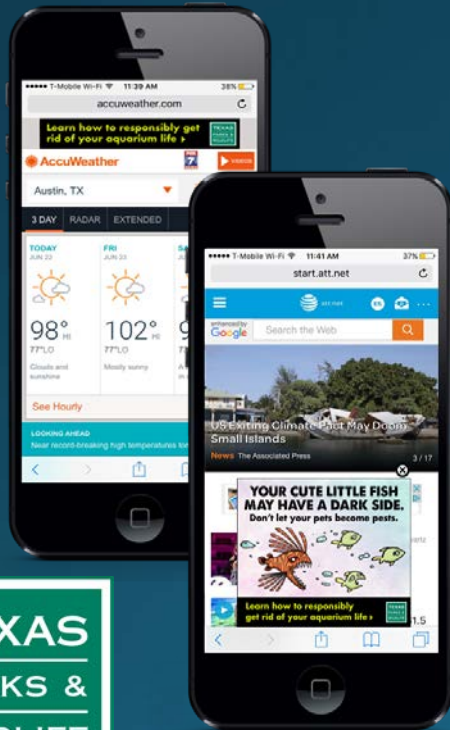
<a href="#">how to euthanize a <b>betta</b> fish</a>	<a href="#">how to euthanize a fish <b>without clove oil</b></a>
<a href="#">how to euthanize a fish <b>with clove oil</b></a>	<a href="#">how to euthanize a fish <b>with baking soda</b></a>
<a href="#">how to euthanize a fish <b>with vodka</b></a>	<a href="#">how to euthanize a fish <b>with clove oil and vodka</b></a>
<a href="#">euthanize fish <b>ice water</b></a>	<a href="#">pithing a fish</a>

Go o o o o o o o o o o g l e >  
 1 2 3 4 5 6 7 8 9 10 Next



# Other Digital Advertising

- Google Display Ads
  - Where: Harlingen, Corpus Christi, Victoria, Houston & Beaumont
  - When: June – August 2017
- Contextual Targeting: Banner Ads on Aquarium-Related Websites





# Print Advertising

- TPWD Magazine Ad - October 2017

**DON'T LET YOUR PETS  
BECOME PESTS.**

Never dump  
(or flush)  
your aquarium  
into the wild.



Aquarium life dumped into the wild can  
introduce disease or become invasive predators.

[www.TexasInvasives.org/neverdumphyourtank](http://www.TexasInvasives.org/neverdumphyourtank)

**TEXAS**  
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WILDLIFE

**TEXAS**  
PARKS &  
WILDLIFE



# Outdoor Advertising

- Vinyl Banners – Used for Tabling Outdoor Events Including Coastal Expo, Get Outside, Bay Day, Coastal Days, Kidfish, etc.
- Billboards



# Texas Invasives iWire Newsletter

## Texas Parks and Wildlife's New "Don't Dump Your Tank" Campaign

"Don't Let Your Pets Become Pests. Never Dump Your Tank into the Wild" is the key message in a new online ad campaign launched by Texas Parks and Wildlife Dept. on June 19, 2017. The campaign is designed to capture the attention of aquarium enthusiasts and direct them to a [new landing page](#) to learn the importance of keeping aquarium fish, animals or plants out of natural bodies of water and how to responsibly dispose of unwanted fish in order to prevent the next invasive species.

Funded by the TPWD's Coastal Fisheries Division, the ads will appear on Facebook, Google Adwords and aquarium-related websites, and target aquarium owners living in larger cities along the Texas coast. The visuals are light-hearted, colorful illustrations that are designed to soften a sensitive topic for those aquarium owners who have no alternative to setting their fish free—other than euthanasia, which is explained on the landing page. TPWD believes that if people were aware of the devastating consequences that introducing possible new invasive species into Texas' waters can have, they would put more effort into finding their pets a new home or feel better about euthanizing their aquarium fish/animals in a humane fashion.

The campaign message will be communicated via the online ads from June through August and in ongoing social media (TPWD twitter accounts @TPWDFish and @TPWDNews, and Facebook page), newsletters, e-banners, and emails. A poster, web graphics and a PDF of how to humanely euthanize a fish will also be used.

TPWD Coastal Fisheries is more than happy to share any of the marketing materials at no charge to organizations who want to help spread the word. The materials are available in a variety of sizes and formats at a dropbox address. If you want to know more or talk about how your organization can use these materials, email [Janis Johnson](#) at TPWD.

**YOUR CUTE LITTLE FISH  
MAY HAVE A DARK SIDE.**

**Don't let your pets become pests.**



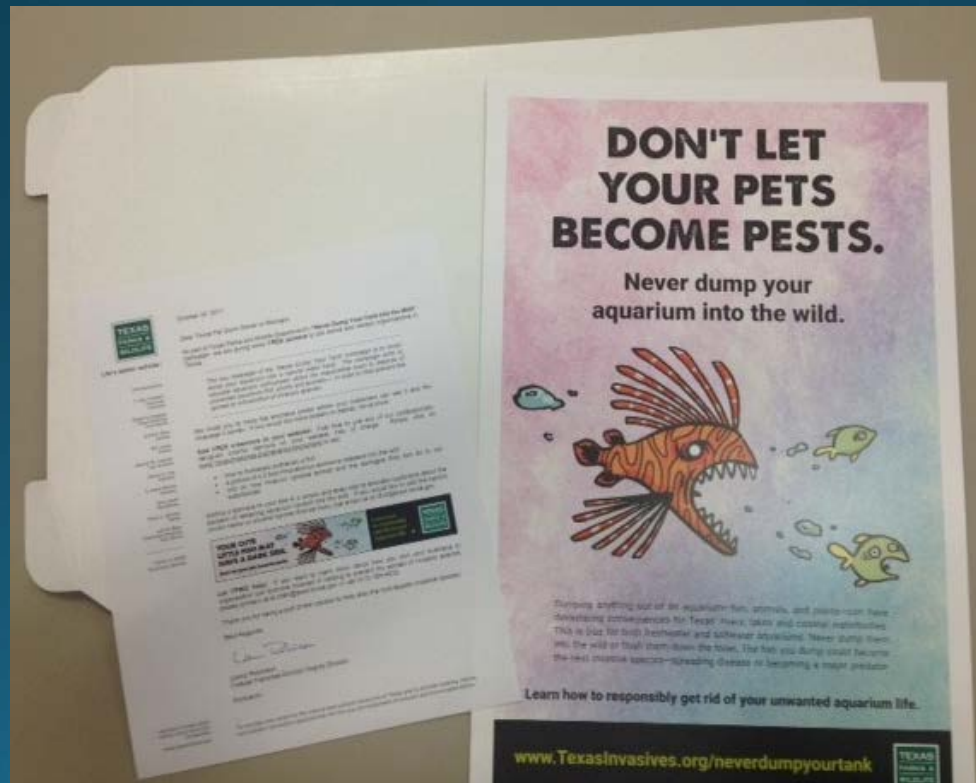
**Learn how to  
responsibly get rid of  
your aquarium life >**



**TEXAS  
PARKS &  
WILDLIFE**

# Direct Mail & Posters

- Pet Stores: 1,200 pet stores
- Science Teachers 2017 Conference (Houston): 2,500 distributed
- TPWD Law Enforcement / Licensing Offices



# Vehicle Magnets

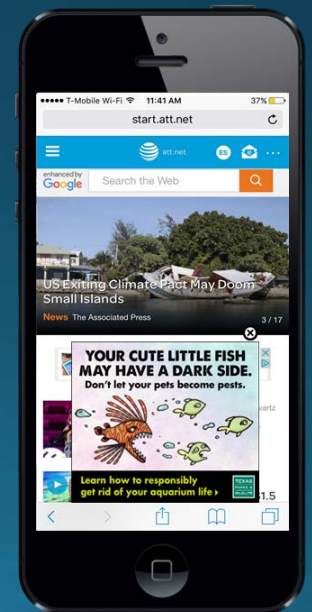
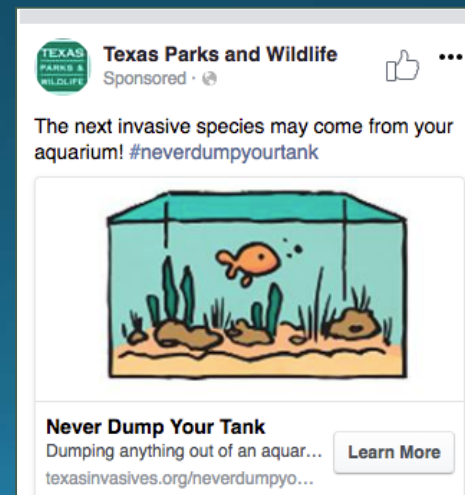
- 50 TPWD Coastal Fisheries Vehicles
- 24" x 12" Tailgate Magnets





# Digital Media Performance

- Online ad campaign delivered our message to 226,000 people, with
- 11,310 clicks to website and 2,580,578 impressions in 9 weeks.
- Facebook:
  - Click-through rates -- 0.07% to 0.78%.
  - Static ad & “canvas” ad (mobile only, more content in ad) worked best at engaging longer views and more shares (467).





# Digital Media Performance

- Webpage - “See Your Options” link had by far the most views.
- Google -
  - Paid search proved to be ineffective and too costly; discontinued
  - Google display network performed better
- Aquarium-related sites -
  - contextual ads did not perform well
  - budget reallocated to Facebook ads

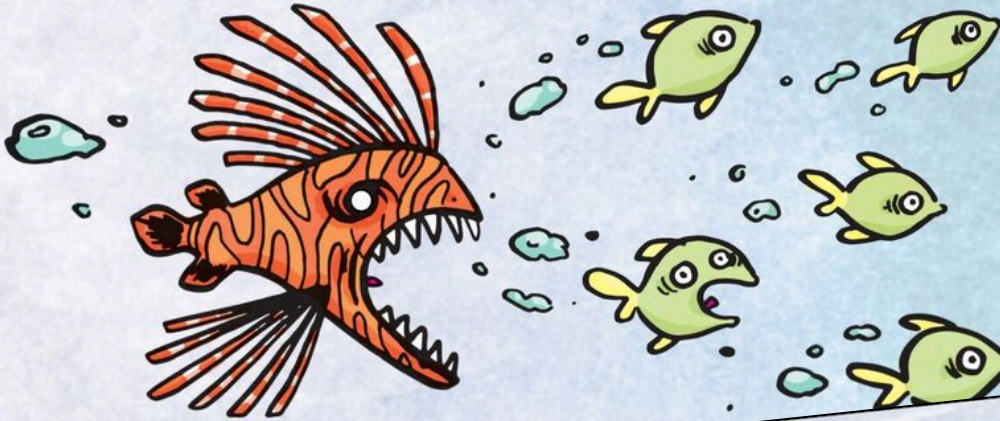


# 2018 Efforts

- Messaging to scuba divers; lionfish derby at Flower Gardens
- TPWD TV episode and/or Video News Releases on invasive species (CF/IF)
- Local TV station visits with biologists catching lionfish, plecos, etc.
- Digital campaign targeting consumers (like FY17)
- E-banners in TPWD e-newsletters & website
- Social Media - more use of posting across platforms.
- Print ads in TPW Magazine and Saltwater magazines
- Press release to publicize campaign, remind public of importance
- Possible email campaign (e.g., registered boaters in coastal areas)

# Art Available On Request...

**DON'T LET YOUR PETS BECOME PESTS.**



**YOUR CUTE LITTLE FISH MAY HAVE A DARK SIDE.**

