

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 587 Nonnative Animals
SPONSOR(S): Beshears
TIED BILLS: IDEN./SIM. BILLS: CS/SB 230

| REFERENCE | ACTION | ANALYST | STAFF DIRECTOR or BUDGET/POLICY CHIEF |
|--|-----------|---------|---------------------------------------|
| 1) Natural Resources & Public Lands Subcommittee | 14 Y, 0 N | Gregory | Shugar |
| 2) Agriculture & Natural Resources Appropriations Subcommittee | | | |
| 3) Government Accountability Committee | | | |

SUMMARY ANALYSIS

Nonnative species are animals living outside of captivity that did not historically occur in Florida. Humans introduced most nonnative species to Florida, while some nonnative species migrated to Florida through natural range expansion. The bill specifically addresses concerns with the following nonnative species:

- Argentine black and white tegus are large lizard native to South America. These lizards present a concern because they compete with and prey on native wildlife, including threatened species;
- Lionfish are a marine species that individuals may identify by their red, brown, and white striped zebra-like appearance and eighteen venomous spines. Lionfish pose problems for the marine environment because they eat native fish, eliminate species that serve important ecological roles such as keeping algae in check on reefs, and compete for food with native predatory fish like grouper and snapper; and
- Conditional nonnative lizards and snakes are Burmese or Indian pythons; reticulated pythons; Northern African pythons; Southern African pythons; Amethystine or scrub pythons; Green Anacondas; or Nile monitors. While they may prey upon other nonnative species, they also prey upon native species and may reduce local native populations. Further, some conditional nonnative snakes and lizards may pose a threat to human and pet safety.

Currently, the Fish and Wildlife Conservation Commission (FWC) undertakes several statewide efforts to restrict the introduction and spread of nonnative species. This includes providing public education, pet amnesty days to surrender exotic pets to pre-qualified adopters, restricting or prohibiting the possession of certain nonnative species, undertaking nonnative species eradication programs, and encouraging hunting and fishing of nonnative species.

The bill directs the FWC, in consultation with the Department of Environmental Protection (DEP), to establish a pilot program to mitigate the impacts of the species identified in the bill by requiring the FWC to form hunting and fishing teams by entering competitively bid contracts with individuals and entities to capture and destroy the identified nonnative animals found on public lands and public waters. The bill requires the FWC to:

- Ensure that each animal captured and killed is documented, photographed, and the geographic location is recorded;
- Direct the disposal of all animals captured and not destroyed;
- Maximize the take of the identified species or to achieve the greatest gain in territory from where the species have been eradicated; and
- Submit a report of findings and recommendations regarding its implementation of the pilot program to the Governor, the President of the Senate, and the Speaker of the House of Representative by January 1, 2020.

The bill authorizes the teams to hunt or fish at the direction of the FWC on all state lands and waters managed by the FWC. Lastly, the bill appropriates \$300,000 from the Land Acquisition Trust Fund for both fiscal years 2017-2018 and 2018-2019 to implement the pilot program.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

PRESENT SITUATION

Nonnative Species

Nonnative species (or exotic species) are animals living outside of captivity that did not historically occur in Florida. Humans introduced most nonnative species to Florida, while some nonnative species migrated to Florida through natural range expansion. Common examples of nonnative species include coyotes, armadillos, parrots, feral hogs, and different species of insects. Only a handful of escaped or released nonnative species survive. The majority of those who do survive likely will not cause a negative effect on native wildlife. The Fish and Wildlife Conservation Commission (FWC) maintains a list of nonnative species on its website.¹

Nonnative species may become invasive species soon after introduction or years after they expand their range. These species may cause ecological problems, cause economic damage, create nuisances, or harm infrastructure.²

The FWC undertakes several statewide efforts to restrict the introduction and spread of nonnative species. This includes providing public education, pet amnesty days to surrender exotic pets to pre-qualified adopters,³ restricting or prohibiting the possession of certain nonnative species, undertaking nonnative species eradication programs, and encouraging hunting and fishing of nonnative species.

Individuals may not transport into the state, introduce, or possess, for any purpose that might reasonably be expected to result in liberation into the state, any nonnative species without a permit from the FWC.⁴ The FWC lists conditional nonnative species in rule 68-5.002, F.A.C. The FWC lists prohibited nonnative species in rule 68-5.003, F.A.C. Individuals who possess these species must meet requirements set by the FWC including certain captivity requirements to prevent escape, identification requirements, record keeping requirements, inspection requirements, transportation requirements, disaster incident plans, and detailed research plans.⁵

Individuals may hunt and fish all nonnative freshwater aquatic life and animal life throughout the year, without restriction, unless otherwise specified in the FWC rules.⁶

¹ FWC, *What is a nonnative species?*, <http://myfwc.com/wildlifehabitats/nonnatives/what-are-nonnatives/> (last visited February 13, 2017); FWC, *Exotic Information*, <http://myfwc.com/wildlifehabitats/nonnatives/exotic-information/> (last visited February 13, 2017).

² FWC, *Invasive Species*, <http://myfwc.com/wildlifehabitats/nonnatives/invasive-species/> (last visited February 13, 2017); FWC, *Exotic Information*, <http://myfwc.com/wildlifehabitats/nonnatives/exotic-information/> (last visited February 13, 2017).

³ FWC, *Exotic Pet Amnesty Day Events*, <http://myfwc.com/wildlifehabitats/nonnatives/amnesty-program/events/> (last visited February 13, 2017); r. 68-5.004, F.A.C.

⁴ s. 379.231(1), F.S.; r. 68-5.001(1), F.A.C.; Four specific species are exempted from these prohibitions.

⁵ r. 68-5.001(3) & (4), F.A.C.

⁶ r. 68-5.001(2), F.A.C.

Tegus

Argentine black and white tegus are large lizard native to South America. Tegus are black and white with banding along the tail. Tegus may reach up to four feet in length. These lizards spend most of their time on land, though they can swim and may submerge themselves for long periods of time. Tegus are primarily active during the day and will burrow or hide overnight. Their diet includes fruits, eggs, insects, and small animals such as lizards and rodents.⁷

These nonnative lizards present a concern because they compete with and prey on native wildlife, including threatened species. Currently, the FWC works with other agencies and organizations to assess the threat of tegus and develop management strategies, including targeted trapping and removal. The goal of these partnerships is to minimize the impact of tegus on native wildlife and natural areas.⁸ The FWC encourages individuals who see tegus to report their location.⁹ The FWC's cooperative efforts have removed over 4000 tegus from Florida.¹⁰

The FWC believes pet owners introduced tegus to Florida when they either released the lizards or allowed them to escape. The FWC has identified tegus in several areas of Florida. Two breeding populations of tegus are known to exist in Hillsborough and Miami-Dade Counties.¹¹

Lionfish

Lionfish are a marine species identifiable by their red, brown, and white striped zebra-like appearance and eighteen venomous spines. Lionfish may grow to eighteen inches in length where they are not indigenous. These marine predators use their spines defensively against larger predators.¹²

Lionfish stalk their prey and corral them into corners. A lionfish diet may include yellowtail snapper, Nassau grouper, parrotfish, banded coral shrimp, and cleaner species. Once lionfish find suitable habitat as an adult, they tend to stay and can reach densities of more than 200 adults per acre.¹³

Lionfish were first reported in Florida waters in 1985 near Dania Beach. The FWC cannot affirmatively identify how lionfish first entered Florida waters, but know ballast water was not likely the culprit. By 2014, Lionfish spread throughout the southern Atlantic, Gulf Coast, and Caribbean.¹⁴

Lionfish pose problems for the marine environment because they eat native fish, eliminate species that serve important ecological roles such as keeping algae in check on reefs, and compete for food with native predatory fish like grouper and snapper.¹⁵

The FWC places several restrictions on the possession of lionfish. Individuals may not import live lionfish or hybrids or eggs.¹⁶ Wholesale and retail dealers may only possess lionfish harvested from

⁷ FWC, *Argentine black and white tegu*, <http://myfwc.com/wildlifehabitats/nonnatives/reptiles/argentine-black-and-white-tegu/> (last visited February 13, 2017).

⁸ Id.

⁹ FWC, *Tegus in Florida*, <http://myfwc.com/media/2380549/Tegu-brochure.pdf> (last visited February 13, 2017).

¹⁰ FWC presentation on Bears, Lionfish, Tegus, and Pythons, p. 23, Agriculture and Natural Resources Appropriations Subcommittee, February 15, 2017, available at:

<http://myfloridahouse.gov/Sections/Documents/loaddoc.aspx?PublicationType=Committees&CommitteeId=2893&Session=2017&DocumentType=Meeting Packets&FileName=anr 2-15-17.pdf>.

¹¹ Id.

¹² FWC, *Lionfish – Pterois volitans*, <http://myfwc.com/wildlifehabitats/nonnatives/marine-species/lionfish/> (last visited February 13, 2017).

¹³ Id.

¹⁴ Id.

¹⁵ Id.

¹⁶ rr. 68-5.005(2) and 68B-5.006(5), F.A.C.

Florida waters or adjacent federal waters.¹⁷ Common carriers or employees of carriers may not carry, knowingly receive for carriage, or permit the carriage of any live lionfish, including their hybrids or eggs, except for lionfish lawfully harvested from Florida waters or adjacent federal waters.¹⁸ Individuals may only possess lionfish for the purpose of destruction, unless permitted by the FWC.¹⁹ Further, individuals may not breed lionfish or cultivate their larvae or eggs, unless permitted by the FWC.²⁰

The FWC undertakes many activities to control the lionfish population, including:

- Partnering with dive shops to train divers to confidentially and safely harvest lionfish;²¹
- Encouraging lionfish excursions and derbies;²²
- Performing research to assess lionfish populations and develop management plans;²³
- Undertaking a lionfish summit in 2013 to develop a collaborative framework for partnering on future lionfish management that includes identification of research priorities, management actions and outreach initiatives;²⁴ and
- Encouraging individuals to report lionfish sightings.²⁵

Further, the FWC provides exceptions to certain marine fishing regulations to encourage fishing for lionfish, including:

- Exempting divers who harvest lionfish from the recreational fishing license requirements if they use certain gear;²⁶
- Allowing recreational divers to harvest an unlimited amount of lionfish;²⁷
- Allowing recreational divers to use rebreathers when harvesting lionfish;²⁸ and
- Allowing the take of lionfish in John Pennekamp State Park.²⁹

Since May 2016, the FWC's cooperative efforts have removed 110,786 lionfish from Florida water.³⁰

Conditional Nonnative Snakes and Lizards

Individuals and businesses may not keep, possess, import into the state, sell, barter, trade, or breed the following snakes and lizards listed in s. 379.372(2)(a), F.S., for personal use or for sale for personal use:

- Burmese or Indian python;
- Reticulated python;
- Northern African python;
- Southern African python;
- Amethystine or scrub python;
- Green Anaconda; or
- Nile monitor.³¹

¹⁷ r. 68-5.005(4), F.A.C.

¹⁸ r. 68-5.005(5), F.A.C.

¹⁹ r. 68-5.005(7) and 68B-5.006(7), F.A.C.

²⁰ rr. 68-5.005(8) and 68B-5.006(6), F.A.C.

²¹ FWC, *Lionfish Derby and Event Calendar*, <http://myfwc.com/fishing/saltwater/recreational/lionfish/events/> (last visited February 13, 2017).

²² Id.

²³ FWC, *Fish and Wildlife Research Institute*, <http://myfwc.com/research/saltwater/fish/lionfish/> (last visited February 13, 2017).

²⁴ FWC, *2013 Lionfish Summit*, <http://myfwc.com/fishing/saltwater/recreational/lionfish/summit/> (last visited February 13, 2017).

²⁵ FWC, *Report Lionfish*, <http://myfwc.com/media/4039504/LionfishBrochure.pdf> (last visited March 3, 2017).

²⁶ r. 68B-5.006(2), F.A.C.

²⁷ r. 68B-5.006(3), F.A.C.

²⁸ rr. 68B-4.012 and 68B-5.006(4), F.A.C.

²⁹ r. 68B-5.002(2)(h), F.A.C.

³⁰ FWC presentation on Bears, Lionfish, Tegus, and Pythons, p. 18, Agriculture and Natural Resources Appropriations Subcommittee, February 15, 2017, available at:

<http://myfloridahouse.gov/Sections/Documents/loaddoc.aspx?PublicationType=Committees&CommitteeId=2893&Session=2017&DocumentType=Meeting Packets&FileName=anr 2-15-17.pdf>.

These conditional nonnative lizards and snakes are native to Africa and Asia. They prey on a variety of birds, mammals, and reptiles, even alligators. Each species of snake or lizard has been observed throughout Florida, but concentrate mainly in south Florida. The FWC believe the current populations are released or escaped pets, though some may have escaped captivity during Hurricane Andrew in 1992.³²

Because of their large size as adults, conditional nonnative snakes and lizards living in Florida have few predators. While they may prey upon other nonnative species, they also prey upon native species and may reduce local native populations. Further, some conditional nonnative snakes and lizards may pose a threat to human and pet safety.³³

The FWC undertakes many activities to control the population of conditional snakes and lizards, including:

- Encouraging individuals to report sightings;³⁴
- Managing a Burmese Python Removal Program the allows that capture of all conditional reptile species;³⁵
- Authorizing python hunting within wildlife management areas;³⁶ and
- Hosting Python Challenges in 2013 and 2016 that offered rewards for harvesting pythons.³⁷

The FWC's cooperative efforts have removed nearly 5000 pythons from Florida.³⁸

Wildlife Management Areas

Wildlife Management Areas (WMAs) are public lands managed, or cooperatively managed with other government agencies, by the FWC for the enjoyment of anglers, hunters, wildlife viewers, and boaters.³⁹ The FWC manages approximately 5.8 million acres as WMAs.⁴⁰ To hunt in a WMA, individuals must possess a hunting license, a WMA permit, and possibly other permits depending on the species or season.⁴¹ Further, each individual WMA may have special regulations for particular areas or species. For example, in J.W. Corbett WMA:

- Conditional nonnative snakes and lizards may be taken after the last day of small game season through the second Sunday in April and during established seasons for the taking of game animals or alligators, and only by persons properly licensed and permitted to take game animals or alligators;
- Guns are a prohibited method of take for conditional nonnative snakes and lizards, except when the use of guns to take game or alligators is authorized and after the last day of small game

³¹ s. 379.372(2)(a), F.S.; r. 68-5.002(4), F.A.C.

³² FWC, *Nonnatives - Burmese Python* <http://myfwc.com/wildlifehabitats/nonnatives/reptiles/burmese-python/> (last visited February 13, 2017); FWC, *Nonnatives - Nile Monitor* <http://myfwc.com/wildlifehabitats/nonnatives/reptiles/nile-monitor/> (last visited February 13, 2017); FWC, *Northern African Python*, <http://myfwc.com/wildlifehabitats/nonnatives/reptiles/northern-african-python/> (last visited February 13, 2017).

³³ Id.

³⁴ Id.

³⁵ FWC, *Python Removal Program*, <http://myfwc.com/license/wildlife/nonnative-species/python-permit-program/> (last visited February 13, 2017).

³⁶ FWC, *Hunting Pythons in Florida*, <http://myfwc.com/wildlifehabitats/nonnatives/python/hunting/> (last visited February 13, 2017).

³⁷ FWC, *2016 Python Challenge*, <http://pythonchallenge.org/> (last visited February 13, 2017).

³⁸ FWC presentation on Bears, Lionfish, Tegus, and Pythons, p. 29, Agriculture and Natural Resources Appropriations Subcommittee, February 15, 2017, available at:

<http://myfloridahouse.gov/Sections/Documents/loaddoc.aspx?PublicationType=Committees&CommitteeId=2893&Session=2017&DocumentType=Meeting Packets&FileName=anr 2-15-17.pdf>.

³⁹ FWC, *What are Wildlife Management Areas?*, <http://myfwc.com/viewing/recreation/wmas/> (last visited February 13, 2017).

⁴⁰ Id.

⁴¹ s. 379.354, F.S.; r. 68A-15.004, F.A.C.; FWC, *WMA Brochures*, <http://myfwc.com/hunting/wma-brochures/> (last visited February 13, 2017).

- season through the second Sunday in April when all legal methods of take for game animals or alligators are allowed, except the use of centerfire rifles is prohibited;
- Conditional nonnative snakes and lizards shall not be removed from the WMA alive;
 - Persons that take any conditional nonnative snakes and lizards shall report the take within 36 hours, and shall provide all data requested; and
 - The day after small game season ends through the second Sunday in April shooting hours for conditional nonnative snakes and lizards shall be 1/2 hour before sunrise and until 1/2 hour after sunset.⁴²

The following WMAs allow python hunting:

- Everglades and Francis S. Taylor WMA;
- Holey Land WMA;
- Rotenberger WMA;
- Big Cypress WMA;
- Picayune Strand WMA;
- Rocky Glades PSGHA; and
- Southern Glades WEA.⁴³

Burmese Pythons in Everglades National Park

Burmese pythons pose a significant threat to the ecosystem in Everglades National Park. Since 2002, the National Park Service has removed over 2000 Burmese pythons from the park. The National Park Service has worked with partner agencies to control python populations and study their effect.⁴⁴

Individuals may not take wildlife within a national park, unless:

- Authorized by federal law;
- Authorized at the discretion of the park's superintendent when authorized by federal law; or
- Federal law mandates trapping.⁴⁵

When federal law authorizes hunting or trapping in national parks, it must be done in accordance with federal law and the law of the state where the park is located.⁴⁶

EFFECT OF THE PROPOSED CHANGES

The bill amends 379.231, F.S., to direct the FWC, in consultation with the Department of Environmental Protection (DEP), to establish a pilot program to mitigate the impacts of tegu lizards, lionfish, and conditional nonnative snakes and lizards.⁴⁷ The bill finds that tegu lizards, lionfish, and conditional nonnative snakes and lizards continue to expand their range and to decimate the fauna and flora of the Everglades and other natural areas, waters, and ecosystems of this state at an accelerating rate. The goal of the pilot program is to examine the benefits of using strategically deployed hunting and fishing teams to slow the advance of the species identified in the bill and begin to contain and eradicate these species from this state.

The bill requires the FWC to form hunting and fishing teams by entering competitively bid contracts with individuals and entities to capture and destroy tegu lizards, lionfish, and conditional nonnative snakes and lizards found on public lands and public waters. The bill requires that:

⁴² r. 68A-15.064(2)(d), F.A.C.

⁴³ FWC, *Hunting Pythons in Florida*, <http://myfwc.com/wildlifehabitats/nonnatives/python/hunting/> (last visited February 13, 2017).

⁴⁴ National Park Service, *Burmese Pythons*, <https://www.nps.gov/ever/learn/nature/burmesepythonsintro.htm> (last visited February 13, 2017).

⁴⁵ 36 C.F.R. 2.2.

⁴⁶ Id.

⁴⁷ Listed in s. 379.37(2)(a)

- Each team ensure each individual who participates in the hunting or fishing pilot program holds a valid hunting or fishing license;
- The FWC ensure that each animal captured and killed is documented, photographed, and the geographic location is recorded;
- The FWC direct the disposal of all animals captured and not destroyed;
- The FWC direct operation of the hunting and fishing teams in areas designed to maximize the take of tegu lizards, lionfish, and conditional nonnative snakes and lizards or to achieve the greatest gain in territory from where the species have been eradicated; and
- The FWC submit a report of findings and recommendations regarding its implementation of the pilot program to the Governor, the President of the Senate, and the Speaker of the House of Representative by January 1, 2020.

The bill authorizes the teams to hunt or fish at the direction of the FWC in:

- Everglades WMA;
- Francis S. Taylor WMA; and
- All other state lands and waters managed by the FWC.

The bill also authorizes the FWC to enter memorandums of agreement with other state and local entities for permission to deploy the teams in other state and local natural areas. The bill requires the FWC to seek permission from the National Park Service to deploy the hunting and fishing teams in Everglades National Park.

Lastly, the bill appropriates \$300,000 from the Land Acquisition Trust Fund for both fiscal years 2017-2018 and 2018-2019 to implement the pilot program.

B. SECTION DIRECTORY:

Section 1. Amends s. 379.231, F.S., relating to regulation of nonnative species.

Section 2. Provides an effective date of July 1, 2017.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

The bill may have an indeterminate negative fiscal impact on the FWC by requiring the agency to develop and implement a pilot program for contracted hunting and fishing to mitigate the impacts of tegu lizards, lionfish, and conditional nonnative snakes and lizards.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill may have an indeterminate positive fiscal impact on members of the hunting and fishing teams by authorizing the FWC to contract with them to capture or destroy tegus lizards, lionfish, and conditional nonnative snakes and lizards on public lands and public waters.

D. FISCAL COMMENTS:

The bill appropriates \$300,000 in nonrecurring funds to the FWC for fiscal years 2017-2018 and 2018-2019 from the Land Acquisition Trust Fund to implement the nonnative species hunting and fishing pilot program created by the bill.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable. This bill does not appear to require counties or municipalities to spend funds or take action requiring the expenditures of funds; reduce the authority that counties or municipalities have to raise revenues in the aggregate; or reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

The bill does not provide rulemaking authority or require executive branch rulemaking.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

None.