HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #:CS/HB 587Nonnative AnimalsSPONSOR(S):Agriculture & Natural Resources Appropriations; BeshearsTIED 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	13 Y, 0 N, As CS	White	Pigott
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 lizards 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.
- 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 FWC to establish a pilot program to mitigate the impacts of priority invasive species by authorizing FWC to enter into competitively bid contracts with individuals and entities to capture and destroy the priority invasive species found on public lands and public waters. The bill requires FWC to:

- Ensure that each animal captured and killed is documented and the geographic location is recorded for research purposes;
- Direct the disposal of all animals captured and not destroyed; 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 also requires pet dealers to implant a passive integrated transponder (PIT) tag in all nonnative animals identified by FWC that threaten the state's wildlife habitat before selling, reselling, or offering for sale such animals. FWC must adopt rules that identify such animals and establish standards for the type of PIT tag that pet dealers must use and the method used to implant the tags.

The FWC currently has \$1.2 million in recurring base funding nonnative species management, and the Fiscal Year 2017-2018 House Proposed Budget also contains an additional \$1.5 million.

The bill has an effective date of July 1, 2017.

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

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 FWC.⁴ FWC lists conditional nonnative species in r. 68-5.002, F.A.C. FWC lists prohibited nonnative species in r. 68-5.003, F.A.C. Individuals who possess these species must meet requirements set by 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 FWC rules.⁶

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

⁵ Rules 68-5.001(3) & (4), F.A.C.

⁶ Rule 68-5.001(2), F.A.C.

<u>Tegus</u>

Argentine black and white tegus are large lizards 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, inspects, 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, 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 FWC encourages individuals who see tegus to report their location.⁹ FWC's cooperative efforts have removed over 4000 tegus from Florida.¹⁰

FWC believes pet owners introduced tegus to Florida when they either released the lizards or allowed them to escape. 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. 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

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

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&Do cumentType=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 Rules 68-5.005(2) and 68B-5.006(5), F.A.C. **STORAGE NAME**: h0587c.ANR

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 FWC.¹⁹ Further, individuals may not breed lionfish or cultivate their larvae or eggs, unless permitted by FWC.²⁰

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, 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, 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

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

- ²⁸ Rules 68B-4.012 and 68B-5.006(4), F.A.C.
- ²⁹ Rule 68B-5.002(2)(h), F.A.C.

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

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¹⁷ Rule 68-5.005(4), F.A.C.

¹⁸ Rule 68-5.005(5), F.A.C.

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

²⁰ Rules 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).

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

²⁶ Rule 68B-5.006(2), F.A.C.

²⁷ Rule 68B-5.006(3), 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:

These conditional nonnative lizards and snakes are native to Africa and Asia. They prey on a variety of birds, mammals, and reptiles, including alligators. Each species of snake or lizard has been observed throughout Florida, but concentrate mainly in south Florida. FWC believes the current populations are released or escaped pets, though some may have escaped captivity during Hurricane Andrew in 1992³²

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

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:³
- Authorizing python hunting within wildlife management areas;³⁶ and
- Hosting Python Challenges in 2013 and 2016 that offered rewards for harvesting pythons.³⁷

FWC's cooperative efforts have removed nearly 5,000 pythons from Florida.³⁸

Wildlife Management Areas

Wildlife Management Areas (WMAs) are public lands managed, or cooperatively managed with other government agencies, by FWC for the enjoyment of anglers, hunters, wildlife viewers, and boaters.³⁹ 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. Corbert 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 Section 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://mvfwc.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&Do cumentType=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 Section 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 Public Small Games Hunting Area; and
- Southern Glades Wildlife and Environmental Area.⁴³

EFFECT OF THE PROPOSED CHANGES

The bill creates s. 379.2311, F.S., to direct FWC to establish a pilot program to mitigate the impacts of priority invasive species.⁴⁴ The bill defines the term "priority invasive species" to include:

- Lizards known as Tegu lizards, consisting of the genera Tupinambis, Salvator, and any taxonomic synonymies of such genera;
- Conditional nonnative snakes and lizards listed in s. 379.372(2), F.S., that includes:
 - Burmese or Indian python;
 - o Reticulated python;
 - Northern African python;
 - Southern African python;
 - Amethystine or scrub python;
 - o Green Anaconda;
 - Nile Monitor; and
 - Any other reptile designated as a conditional or prohibited species by the commission;⁴⁵
- Pterois volitans, also known as red lionfish; and
- Pterois miles, also known as the common lionfish or devil firefish.

The bill finds that priority invasive species 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, trained private contractors to slow the advance of the species identified in the bill and begin to contain and eradicate these species from this state.

The bill authorizes FWC to enter competitively bid contracts with individuals and entities to capture and destroy priority nonnative species on public lands and public waters. The bill requires that:

- Any private contracted work performed on public land or in waters of the state not owned or managed by FWC must have the consent of the owner;
- FWC ensure that each animal captured and killed is documented and the geographic location is recorded for research purposes;

⁴⁵ Section 379.372(2)(a), F.S.; r. 68-5.002(4), F.A.C.

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⁴² Rule 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 Listed in s. 379.37(2)(a), F.S.

- FWC direct the disposal of all animals captured and not destroyed in removal efforts; and
- 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 also requires pet dealers to implant a passive integrated transponder (PIT) tag in all nonnative animals identified by FWC that threaten the state's wildlife habitat before selling, reselling, or offering for sale such animals. The bill defines the term "pet dealer" to include any person who, in the ordinary course of business, engages in the sale of more than 20 animals per year to the public, including breeders who sell animals directly to the public. FWC must adopt rules that identify such animals and establish standards for the type of PIT tag that pet dealers must use and the method used to implant the tags.

The bill has an effective date of July 1, 2017.

- **B. SECTION DIRECTORY:**
 - Section 1. Creates s. 379.2311, F.S., relating to nonnative animal management.
 - 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 FWC currently has \$1.2 million in recurring base funding nonnative species management, including \$260,000 for lionfish, \$445,000 for pythons, \$375,000 for tegus, and \$104,000 for Nile monitor lizards. The Fiscal Year 2017-2018 House Proposed Budget also contains an additional \$1.5 million for nonnative species management, with \$500,000 in recurring funds and \$1.0 million in nonrecurring funds.

- 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 entities or individuals by authorizing FWC to contract with entities or individuals to capture or destroy priority invasive species on public lands and public waters.

The bill may have an indeterminate negative fiscal impact on pet dealers by requiring them to implant a PIT tag on species identified by FWC that threaten the state's wildlife habitats before selling, reselling, or offering for sale any such species.

D. FISCAL COMMENTS:

None.

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 requires FWC to adopt rules that identify nonnative animals that threaten the state's wildlife habitat and establish standards for the type of PIT tag that pet dealers must implant in such animals and the method used to implant the tags.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On April 3, 2017, the Agriculture and Natural Resources Appropriations Subcommittee adopted a strike all amendment and a substitute amendment and reported the bill favorably as a committee substitute. The amendments:

- Defined "pet dealer" and "priority invasive species;"
- Authorized FWC to enter competitively bid contracts with individuals and entities to capture and destroy priority nonnative species on public lands and public waters;
- Required any private contracted work performed on public land or in waters of the state not owned or managed by FWC must have the consent of the owner;
- Required FWC to ensure that each animal captured and killed is documented and the geographic location is recorded for research purposes;
- Required FWC to direct the disposal of all animals captured and not destroyed in removal efforts;
- Required 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;
- Removed the requirement for FWC to maximize the take of the identified species or to achieve the greatest gain in territory from where the species have been eradicated;
- Removed an appropriation to fund the pilot program;
- Required pet dealers to implant a passive integrated transponder (PIT) tag in all nonnative animals identified by FWC that threaten the state's wildlife habitat before selling, reselling, or offering for sale such animals; and
- Required FWC to adopt rules that identify such animals and establish standards for the type of PIT tag that pet dealers must use and the method used to implant the tags.

This analysis is drafted to the committee substitute as reported favorably by the Agriculture and Natural Resources Appropriations Subcommittee.