

## HOUSE OF REPRESENTATIVES STAFF ANALYSIS

**BILL #:** CS/CS/HB 145 Nonnative Animals

**SPONSOR(S):** Agriculture & Natural Resources Appropriations Subcommittee; Natural Resources & Public Lands Subcommittee; Beshears

**TIED BILLS:** **IDEN./SIM. BILLS:** SB 168

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Natural Resources & Public Lands Subcommittee	13 Y, 0 N, As CS	Gregory	Shugar
2) Agriculture & Natural Resources Appropriations Subcommittee	12 Y, 0 N, As CS	White	Pigott
3) Government Accountability Committee	15 Y, 0 N	Gregory	Williamson

### SUMMARY ANALYSIS

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

- Tegu lizards;
- Lionfish; and
- Conditional nonnative lizards and snakes, which are Burmese or Indian pythons, reticulated pythons, Northern African pythons, Southern African pythons, Amethystine or scrub pythons, Green Anacondas, and Nile monitors.

The bill requires 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, photographed, 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, 2021.

The bill has an insignificant negative fiscal impact on the FWC that can be handled within existing resources. See *Fiscal Analysis & Economic Impact Statement*.

## 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 inhabit 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.<sup>1</sup>

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.<sup>2</sup>

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,<sup>3</sup> 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.<sup>4</sup> 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.<sup>5</sup>

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

###### Tegus

Argentine black and white tegus (tegas) 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. 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.<sup>7</sup>

---

<sup>1</sup> FWC, *What is a nonnative species?*, <http://myfwc.com/wildlifehabitats/nonnatives/what-are-nonnatives/> (last visited January 23, 2018); FWC, *Exotic Information*, <http://myfwc.com/wildlifehabitats/nonnatives/exotic-information/> (last visited January 23, 2018).

<sup>2</sup> FWC, *Invasive Species*, <http://myfwc.com/wildlifehabitats/nonnatives/invasive-species/> (last visited January 23, 2018); FWC, *Exotic Information*, <http://myfwc.com/wildlifehabitats/nonnatives/exotic-information/> (last visited January 23, 2018).

<sup>3</sup> FWC, *Exotic Pet Amnesty Day Events*, <http://myfwc.com/wildlifehabitats/nonnatives/amnesty-program/events/> (last visited January 23, 2018); r. 68-5.004, F.A.C.

<sup>4</sup> Section 379.231(1), F.S.; r. 68-5.001(1), F.A.C. Four specific species are exempt from these prohibitions.

<sup>5</sup> Rules 68-5.001(3) and (4), F.A.C.

<sup>6</sup> Rule 68-5.001(2), F.A.C.

<sup>7</sup> FWC, *Argentine black and white tegu*, <http://myfwc.com/wildlifehabitats/nonnatives/reptiles/argentine-black-and-white-tegu/> (last visited January 23, 2018).

FWC has identified tegus in several areas of Florida. Two breeding populations of tegus are known to exist in Hillsborough and Miami-Dade Counties.<sup>8</sup> These nonnative lizards present a concern because they compete with and prey on native wildlife, including threatened species. Individuals must possess a permit from FWC to sell tegus.<sup>9</sup> 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.<sup>10</sup> FWC encourages individuals who see tegus to report their location.<sup>11</sup> FWC's cooperative efforts have removed over 5000 tegus from Florida.<sup>12</sup>

### Lionfish

Lionfish are a marine species identifiable by their red, brown, and white striped zebra-like appearance and 18 venomous spines. Lionfish may grow to 18 inches in length where they are not indigenous. These marine predators use their spines defensively against larger predators.<sup>13</sup>

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.<sup>14</sup>

Lionfish were first reported in Florida waters near Dania Beach in 1985. By 2014, lionfish spread throughout the southern Atlantic, Gulf Coast, and Caribbean.<sup>15</sup> 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.<sup>16</sup>

FWC places several restrictions on the possession of lionfish. Individuals may not import live lionfish, hybrids, or eggs.<sup>17</sup> Wholesale and retail dealers may only possess lionfish harvested from Florida waters or adjacent federal waters.<sup>18</sup> 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.<sup>19</sup> Individuals may only possess lionfish for the purpose of destruction, unless permitted by FWC.<sup>20</sup> Further, individuals may not breed lionfish or cultivate their larvae or eggs, unless permitted by FWC.<sup>21</sup>

---

<sup>8</sup> 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](http://myfloridahouse.gov/Sections/Documents/loaddoc.aspx?PublicationType=Committees&CommitteeId=2893&Session=2017&DocumentType=Meeting%20Packets&FileName=anr%202-15-17.pdf).

<sup>9</sup> Section 379.3761, F.S.

<sup>10</sup> FWC, *Tegus in Florida*, <http://myfwc.com/media/2380549/Tegu-brochure.pdf> (last visited January 23, 2018).

<sup>11</sup> *Id.*

<sup>12</sup> FWC presentation on Nonnative Fish and Wildlife Update, p. 10, FWC Meeting, December 5, 2017, available at: <http://myfwc.com/media/4339787/4A-NonnativePresentation.pdf>.

<sup>13</sup> FWC, *Lionfish – Pterois volitans*, <http://myfwc.com/wildlifehabitats/nonnatives/marine-species/lionfish/> (last visited January 23, 2018).

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> Rules 68-5.005(2) and 68B-5.006(5), F.A.C.

<sup>18</sup> Rule 68-5.005(4), F.A.C.

<sup>19</sup> Rule 68-5.005(5), F.A.C.

<sup>20</sup> Rules 68-5.005(7) and 68B-5.006(7), F.A.C.

<sup>21</sup> Rules 68-5.005(8) and 68B-5.006(6), F.A.C.

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

- Partnering with dive shops to train divers to confidentially and safely harvest lionfish;<sup>22</sup>
- Encouraging lionfish excursions and derbies;<sup>23</sup>
- Performing research to assess lionfish populations and develop management plans;<sup>24</sup>
- 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;<sup>25</sup> and
- Encouraging individuals to report lionfish sightings.<sup>26</sup>

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;<sup>27</sup>
- Allowing recreational divers to harvest an unlimited amount of lionfish;<sup>28</sup>
- Allowing recreational divers to use rebreathers when harvesting lionfish;<sup>29</sup> and
- Allowing the take of lionfish in John Pennekamp State Park.<sup>30</sup>

Since May 2016, FWC's cooperative efforts have removed 110,786 lionfish from Florida water.<sup>31</sup>

### 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.<sup>32</sup>

Reptile dealers, public exhibitors, researchers, or nuisance trappers may apply for a permit to import or possess conditional nonnative snakes and lizards.<sup>33</sup> Those who possess conditional nonnative snakes and lizards must keep them indoors or in outdoor enclosures with a fixed roof and a permanent passive integrated transponder (PIT) tag, also known as a microchip.<sup>34</sup> Owners of such species must submit a Captive Wildlife Disaster and Critical Incident Plan to the commission and must maintain records of their inventory.<sup>35</sup>

---

<sup>22</sup> FWC, *Lionfish Derby and Event Calendar*, <http://myfwc.com/fishing/saltwater/recreational/lionfish/events/> (last visited January 23, 2018).

<sup>23</sup> *Id.*

<sup>24</sup> FWC, *Fish and Wildlife Research Institute*, <http://myfwc.com/research/saltwater/fish/lionfish/> (last visited January 23, 2018).

<sup>25</sup> FWC, *FWC Lionfish Summit Summary Report*, <https://www.mbara.org/pdf/REPORT%202013%20Florida%20Fish%20and%20Wildlife%20Conservation%20Commission%20Lionfish%20Summit.pdf> (last visited January 23, 2018).

<sup>26</sup> FWC, *Report Lionfish*, <http://myfwc.com/media/4039504/LionfishBrochure.pdf> (last visited January 23, 2018).

<sup>27</sup> Rule 68B-5.006(2), F.A.C.

<sup>28</sup> Rule 68B-5.006(3), F.A.C.

<sup>29</sup> Rules 68B-4.012 and 68B-5.006(4), F.A.C.

<sup>30</sup> Rule 68B-5.002(2)(h), F.A.C.

<sup>31</sup> 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/loadoc.aspx?PublicationType=Committees&CommitteeId=2893&Session=2017&DocumentType=Meeting Packets&FileName=anr 2-15-17.pdf](http://myfloridahouse.gov/Sections/Documents/loadoc.aspx?PublicationType=Committees&CommitteeId=2893&Session=2017&DocumentType=Meeting%20Packets&FileName=anr%202-15-17.pdf).

<sup>32</sup> Rule 68-5.002(4), F.A.C.

<sup>33</sup> Rules 68-5.001 and 68-5.002, F.A.C.; FWC, *Conditional Snakes and Lizards*, <http://myfwc.com/wildlifehabitats/nonnatives/regulations/snakes-and-lizards/> (last visited January 23, 2018).

<sup>34</sup> Rule 68-5.001(3)(e), F.A.C.; FWC, *Conditional Snakes and Lizards*, <http://myfwc.com/wildlifehabitats/nonnatives/regulations/snakes-and-lizards/> (last visited January 23, 2018).

<sup>35</sup> *Id.*

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.<sup>36</sup>

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.<sup>37</sup>

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

- Encouraging individuals to report sightings;<sup>38</sup>
- Managing a Burmese Python Removal Program that allows the capture of all conditional reptile species;<sup>39</sup>
- Authorizing python hunting within wildlife management areas;<sup>40</sup> and
- Hosting Python Challenges in 2013 and 2016 that offered rewards for harvesting pythons.<sup>41</sup>

FWC's cooperative efforts have removed over 5,000 pythons from Florida.<sup>42</sup>

## EFFECT OF THE PROPOSED CHANGES

The bill creates s. 379.2311, F.S., to require FWC to establish a pilot program to mitigate the impacts of priority invasive species on the public lands and waters of the state. The bill defines the term "priority invasive species" to include:

- Lizards of the genus *Tupinambis*, also known as tegu lizards;
- Conditional nonnative snakes and lizards identified in s. 379.372(2), F.S.;<sup>43</sup>
- *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 priority invasive species and to contain and eradicate these species from Florida.

The bill authorizes FWC to enter competitively bid contracts with individuals and entities to capture and destroy priority invasive 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 have the consent of the owner;
- FWC ensure that each priority invasive species captured and disposed is documented, photographed, and the geographic location is recorded for research purposes;
- FWC direct the disposal of all animals captured and not destroyed in removal efforts; and

---

<sup>36</sup> FWC, *Nonnatives - Burmese Python*, <http://myfwc.com/wildlifehabitats/nonnatives/reptiles/burmese-python/> (last visited January 23, 2018); FWC, *Nonnatives - Nile Monitor*, <http://myfwc.com/wildlifehabitats/nonnatives/reptiles/nile-monitor/> (last visited January 23, 2018); FWC, *Northern African Python*, <http://myfwc.com/wildlifehabitats/nonnatives/reptiles/northern-african-python/> (last visited January 23, 2018).

<sup>37</sup> *Id.*

<sup>38</sup> *Id.*

<sup>39</sup> FWC, *Python Removal Program*, <http://myfwc.com/license/wildlife/nonnative-species/python-permit-program/> (last visited January 23, 2018).

<sup>40</sup> *Id.*

<sup>41</sup> FWC, *2016 Python Challenge*, <http://pythonchallenge.org/> (last visited January 23, 2018).

<sup>42</sup> FWC presentation on Nonnative Fish and Wildlife Update, p. 4, FWC Meeting, December 5, 2017, available at: <http://myfwc.com/media/4339787/4A-NonnativePresentation.pdf>.

<sup>43</sup> Section 379.372(2)(a), F.S.; r. 68-5.002(4), F.A.C.

- 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, 2021.

**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, 2018.

**II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT**

**A. FISCAL IMPACT ON STATE GOVERNMENT:**

1. Revenues:

None.

2. Expenditures:

FWC currently has \$2.4 million appropriated in its recurring base budget for nonnative species management. There is also an additional \$1 million in nonrecurring funds for lionfish management appropriated in the House Proposed General Appropriations Act (HB 5001). FWC can use existing resources for the pilot program and report.

**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 in the business of capturing or destroying species by authorizing FWC to contract with these entities or individuals to capture or destroy priority invasive species on public lands and public waters. The bill may further have an indeterminate positive fiscal impact on individuals or entities in the business of selling or fishing of the species threatened by these priority invasive 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 affect county or municipal governments.

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**

On December 6, 2017, the Natural Resources and Public Lands Subcommittee adopted an amendment and reported the bill favorably as a committee substitute. The amendment removed the definition for “pet dealer” and removed the requirement that pet dealers 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 amendment also removed the requirement for FWC to adopt rules to identify such animals and adopt standards for the type of PIT tag that pet dealers must use and the method used to implant the tags.

On February 6, 2018, the Agriculture & Natural Resources Appropriations Subcommittee adopted an amendment and reported the bill favorably as a committee substitute. The amendment removed the appropriations from the bill.

The bill analysis is drafted to the committee substitute as passed by the Agriculture & Natural Resources Appropriations Subcommittee.