

# Alligator wrestling in Florida: examining impacts on animals and conservation



## Headline Issues

- > Alligator wrestling poses acute and systemic welfare threats to the alligators involved.
- > Many wrestling venues claim to support environmental conservation, but these claims are largely unsupported.
- > Alligator wrestling venues should be clearly labelled as entertainment and prohibited from promoting themselves as conservation, rescue, or sanctuary venues.

The Center for Environmental and Animal Protection (CEAP) aims to provide academic leadership for research policy-making and addressing critical social issues at the intersection of environmental and animal protection.

## Summary

Alligator wrestling is a popular tourist attraction in Florida, where it originated as a Native American hunting method. This study, the first of its kind, used a sample of 94 videos of alligator wrestling on YouTube to understand the characteristics of a typical alligator wrestling match and its impact on alligator welfare and environmental conservation.

Florida wrestling facilities often claim that the American alligators used in their performances are not harmed and that their facilities support environmental conservation efforts.

Our analysis suggests that alligator wrestling facilities are highly stressful to the individual alligators involved, and that they do little to benefit environmental or animal conservation. Instead, wrestlers prioritize entertaining tourists or discussing educational or environmental topics that are largely irrelevant to or even undermine conservation efforts.

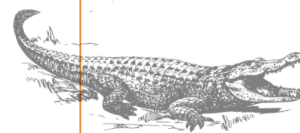
***Examining videos of alligator wrestling allowed us to gather data while avoiding possible ethical concerns with supporting alligator wrestling facilities.***

## A brief history of alligator wrestling

In the U.S. South, alligators are commonly used in wildlife tourism attractions. Alligator wrestling is a long-standing tourist attraction that originated in Florida.

For thousands of years, Florida's Native Americans hunted alligators using techniques mimicked in today's shows. As Florida became a popular tourist destination, visitors paid to watch hunting demonstrations, which proved to be more lucrative than hunting.

In our sample of 94 alligator wrestling videos, 77% took place at facilities that are not owned by Native Americans.



***Alligator wrestling is a staged performance where captive American alligators are captured, restrained, and manipulated by humans to entertain audiences.***

## Wrestling techniques and environmental conditions may be stressors

Alligator wrestlers often claim alligators are not harmed in their performances, but evidence from the 94 videos shows alligators having their torsos and jaws restrained (see figure). These behaviors have been documented as key stressors for crocodilians.

Likewise, unnatural captive settings present in 96% of videos may be stressful for alligators and other reptiles. An example is keeping reptiles together with conspecifics or forcing repeated human contact.

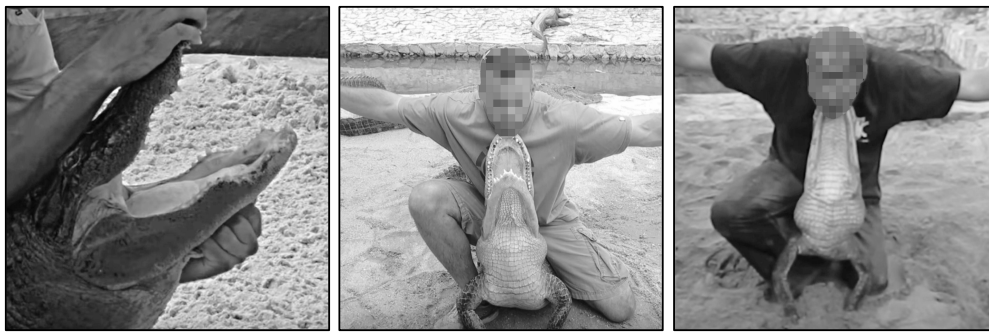
## Wrestlers' claims of environmental conservation benefits appear unwarranted

In half of the videos examined, wrestlers claimed that their facilities benefit conservation, often through education or because they wrestle wild alligators taken into their facility after being reported as a nuisance by the public.

According to Florida's Statewide Nuisance Alligator program, so-called nuisance alligators must be killed and cannot be relocated. Wrestlers in one-quarter of videos claimed to give these animals a second chance at life. Even if true, this is an animal welfare benefit, not a conservation benefit.

From a conservation perspective, alligators are species of 'least concern' according to IUCN. Keeping individuals in captivity is deemed scientifically unnecessary to protect population levels.

Fig. 1



**61%**

The Florida Smile

**52%**

The Face-off

**49%**

Bulldogging

### Research methods and data sources

This study is the first attempt to quantify the harms of alligator wrestling, using social media methods to avoid the ethical concerns associated with supporting wrestling facilities.

94 YouTube videos of alligator wrestling shows were assessed and coded for their environmental features and wrestling techniques.

The wrestlers' commentary in each video was then analyzed to assess environmental conservation claims.

### Wrestlers' commentary focuses minimally on environmental conservation

In 49% of videos, wrestlers addressed environmental conservation topics in their performances (Table 1). Few promoted ethical messaging about cohabiting responsibly with wild alligators, i.e. not feeding them.

More wrestlers discussed rescuing wild nuisance gators (which may benefit the animals but is unnecessary for conservation). Others described how to run away from or fight a gator, which does not promote responsible cohabitation.

Comparatively, wrestlers in 96% of videos focused on entertaining tourists with jokes. Finally, wrestlers in 94% of the videos educated tourists about non-conservation issues such as alligator anatomy or the history of wrestling, but the latter was often false or misleading. For example, one venue repeatedly tied the origin of alligator wrestling to cattle drivers.

### Stressors are present in nearly all wrestling facilities and performances.

Alligators were restrained in 96% of performances, flipped on their backs in 12%, and had their jaws tied shut in 20%. See Figure 1 for examples.

Many environmental features of wrestling venues are contradictory to alligators' natural habitats. Just 14% of arenas showed a water feature deep enough for alligators to fully submerge, and 42% of water features had clear vs. the preferred murky water. Only 4% of features contained waterside foliage.

Nearly every performance required alligators to be touched by humans, and 11 of 15 venues housed alligators together with conspecifics. These are key stressors for most captive reptiles.

### Summary:

**-Alligator wrestling poses systemic and acute welfare threats to alligators with little evidence that they benefit environmental conservation**

**-Alligator wrestling venues should be clearly labeled as entertainment and prohibited from promoting themselves as conservation, rescue, or sanctuary attractions**

**"If you're ever bitten by an alligator, most people say you're supposed to go for what body part? Nose? The eyes? The ones who say the eyes, if you do go for the eyes on an alligator, the eyes fall down into a hollow socket into the skull so you can't poke them out..."**



**Table 1: Wrestlers' Environmental Conservation Topics**

Letting alligators be	Wrestlers mentioned the importance of keeping a safe distance, not going into natural lakes, and not feeding wild gators
What to do when bit	Wrestlers instructed tourists on how to fight a wild alligator if bitten by one
How to run away	Wrestlers discussed how to run away from a wild alligator, specifically to run straight (and not zigzag as the urban legend says)
Rescuing alligators	Wrestlers claimed that they rescue and rehabilitate former nuisance alligators and called for donations to support the upkeep of alligators.

### About This Research Brief

This research brief is based on Riordan C, Jacquet J, Franks B. Investigating the welfare and conservation implications of alligator wrestling for American Alligators (*Alligator mississippiensis*). *PLoS ONE*. 2020; 15(11):e0242106. <https://doi.org/10.1371/journal.pone.0242106>

### References

- Eley R, Woodward AA, Balaguera-Reina SA. Alligator *Mississippiensis* [Internet]. Gland, Switzerland: IUCN Red List of Threatened Species; 2019.
- Florida Fish & Wildlife Conservation Commission (FWC). Statewide Nuisance Alligator Program [Internet]. Tallahassee: FWC; 2019
- Franklin CE et al. Comparison of stress induced by manual restraint and immobilisation in the Estuarine Crocodile, *Crocodylus porosus*. *J Exp Zool A Comp Exp Biol*. 2003; 298(2):86-92.
- Lance VA, Eley RM. Stress-induced suppression of testosterone secretion in male alligators. *J Exp Zool*. 1986; 239(20):241-46.
- Smith GD, Adams GL, Dinkelacker SA. Important habitat characteristics for American Alligators (*Alligator mississippiensis*) on the edge of their range. *Herpetol Conserv Biol*. 2016; 11(1):72-79.
- Warwick C. Important ethological and other considerations of the study and maintenance of reptiles in captivity. *Appl Anim Behav Sci*. 1990; 27(4):363-66.
- Warwick C. Reptilian ethology in captivity: Observations of some problems and an evaluation of their aetiology. *App Anim Behav Sci*. 1990; 26(1-2):1-13.
- Weinheimer CJ et al. Peripheral Circulation in Alligator *mississippiensis* Effects of Diving, Fear, Movement, Investigator Activities, and Temperature. *J Comp Physiol*. 1982; 148:57-63.
- West P. The Enduring Seminoles: From alligator wrestling to ecotourism. Gainesville, FL: University of Florida Press; 1998.

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