

Aliens of Kamayca

A newsletter on non-indigenous species in Jamaica

IMPACT OF FERAL ANIMALS ON THE ENVIRONMENT

“Feral” is a terminology used to describe animals that were once domesticated but have now reverted to the wild. Feral animals impact on native species through predation on vulnerable plants and animals or by competition with native species, habitat destruction and introduction of diseases. They typically have few natural predators or fatal diseases and some may have high reproductive rates. As a result, their populations have not naturally diminished and they can multiply rapidly if conditions are favourable.

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FERAL PIGS

Rooting, wallowing, and trampling are just a few of the natural behaviour exhibited by the feral pig; *Sus scrofa*. During their feeding which involves grubbing up earth in pursuit of tubers and earthworms, ferals pigs contribute to the destruction of vegetation, displacement of rocks and logs which results in soil erosions, trail formations and can ultimately lead to land degradation. Their impacts on the environment does not stop there but may extend to the spread of invasive alien species (IAS) via seed dispersal (by eating weed fruits and pods and excreting the seeds) and by disturbing areas when they feed which makes it easy for IAS to become established. Major weeds such as Pond Apple (*Annona glabra*), Mimosa (*Mimosa pigra*) and Mesquite (*Prosopis sp.*) are a few of the IAS which are spread through this medium and colonises disturbed ground.

Of greatest concern to Jamaican conservationists is the feral pig’s predation on the eggs and hatchlings of endangered species. Feral pigs have been documented preying on the eggs and hatchlings of sea turtles as well as the eggs of the American Crocodile (*Crocodylus acutus*) and Jamaican Iguana (*Cyclura collei*). This poses a major threat to biodiversity and the conservation of these species.



Feral Pig Eating Turtle Eggs

Feral pigs are pest to the environment and biodiversity. Snaring, hunting and trapping are viable options used to reduce population numbers of this environmental pest. However, if the population continue to persist despite removal efforts, another option is to fence environmentally sensitive areas.

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FERAL CATS

Next to dogs, cats may very well be man's best friend. A recent poll among 2000 persons revealed that 74% of respondents like dogs compared who liked cats (AnimalBehaviourAssociates.com). However, when one considers that more cats may be able to fit in a house, the actual numbers of these animals as pets may be quite closer than it appears.



Cats are ferocious by nature; hunters who enjoy the thrill of the chase – and the kill. Have you ever seen a cat chase its tail? Why does a domestic cat that eats food prepared and presented by humans, still have the need to sharpen its claw? “Nature” is the most likely answer. This may definitely be one clear instance where nurture has not gotten the better of nature!

The domestic cat species, *Felis catus*, is among the nomination of **100 of the World's Worst Invasive Species**. Species on the list are classified into two ecologically significant categories based on their characteristics and impact on the environment. The categories relate to:

- ◆ serious impact on biological diversity and/or human activities,
- ◆ an illustration of important issues surrounding biological invasion

In Jamaica, feral cats are known to prey on native species. The Jamaican Iguana (*Cyclura collei*) and the Jamaican Boa (*Epicrates subflavus*) are two such animals whose populations are threatened due to feral cats; both are currently classified as “endangered”. For these native animals, the reality is that if no measures are put in place to prevent further population decline the possibility exists that these species will become extinct in the near future.

How does the pet in your home affect our conservation efforts?

Domestic, Stray and Feral Cats

To paraphrase Williams Shakespeare, a cat by any other name would still be a cat. Whatever the case may be, a domestic, a stray and a feral cat all belong to the same species. The primary differ-

ence among those classifications is the level of human interaction the animal has been exposed to.

Domestic cats enjoy the affection of humans and occupy a home. A stray cat, on the other hand, may have once been a domestic cat that no longer has a home which implies that there was either past or minimal human contact. On the other end of the spectrum, feral cats are born wild, were never domesticated and loathe/fear human contact to the point where it will never happen.

While having a pet can be a very fulfilling and rewarding experience, it comes with great responsibilities. A pet owner should be conscientious in satisfying the needs of the animal in his or her care, ultimately ensuring that there is no need for it to stray. Further, the caregiver should ensure that animals are spayed or neutered to prevent any unwanted off-springs. If the animal is allowed to breed, the progeny should be placed in homes where adequate provisions are made for the animal. Where the caregiver can no longer provide for pet, alternate housing arrangements should be made such as adoption or euthanization.

Do not release unwanted pets in the wild!

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FERAL GOATS

Goats have been domesticated for hundreds of years and its meat is enjoyed by the masses. However, goats can become a major environmental and agricultural pest when in its feral state. Feral goats (*Capra hircus*) impacts on the environment has great economic implications.



Feral goats have quite an appetite for plants and feeds on plant's leaves, twigs, flowers, fruit and roots. Getting their food is not an issue as goats are very skilful and are capable of climbing steep slopes, which enables them to graze at varying elevations.



Adult trees may have a greater chance of surviving the ferocious jaws of the goats due to the presence of foliage that are outside their reach; however their seedlings most likely won't survive. Therefore the implications for survival of native plant species and to a greater extent plant communities are threatened.

Feral goats cause land degradation through soil damage, over grazing and strip browsing. The soil's crust and its protective cover of vegetation are disturbed through trampling by the goat's hooves. Goats also pose a biosecurity risk as vectors of many livestock diseases namely Leptospirosis, Rabies and Salmonellosis, just to name a few.

The impacts of feral goats supersede just plant as native animals are also affected. Goats compete with many animals species for food, water and shelter.

Economic losses as a result of the impact of feral goats include:

- ◆ **Costs to primary production**– Foresters incur cost due to damage to seedlings

- ◆ **Costs associated with land degradation** -This cost is incurred as a result of the monetary resources needed to rehabilitate degraded lands
- ◆ **Costs associated with management of goats by the public** – This cost is incurred through the installation of exclusion fences for feral goats.

WHAT TO DO?

The management of feral goats may be achieved through the erection of exclusion fences around areas sensitive to the impacts. Additionally, owners of domestic goats should ensure they are properly secured within the boundaries of their private property and are not freely browsing in the wild.

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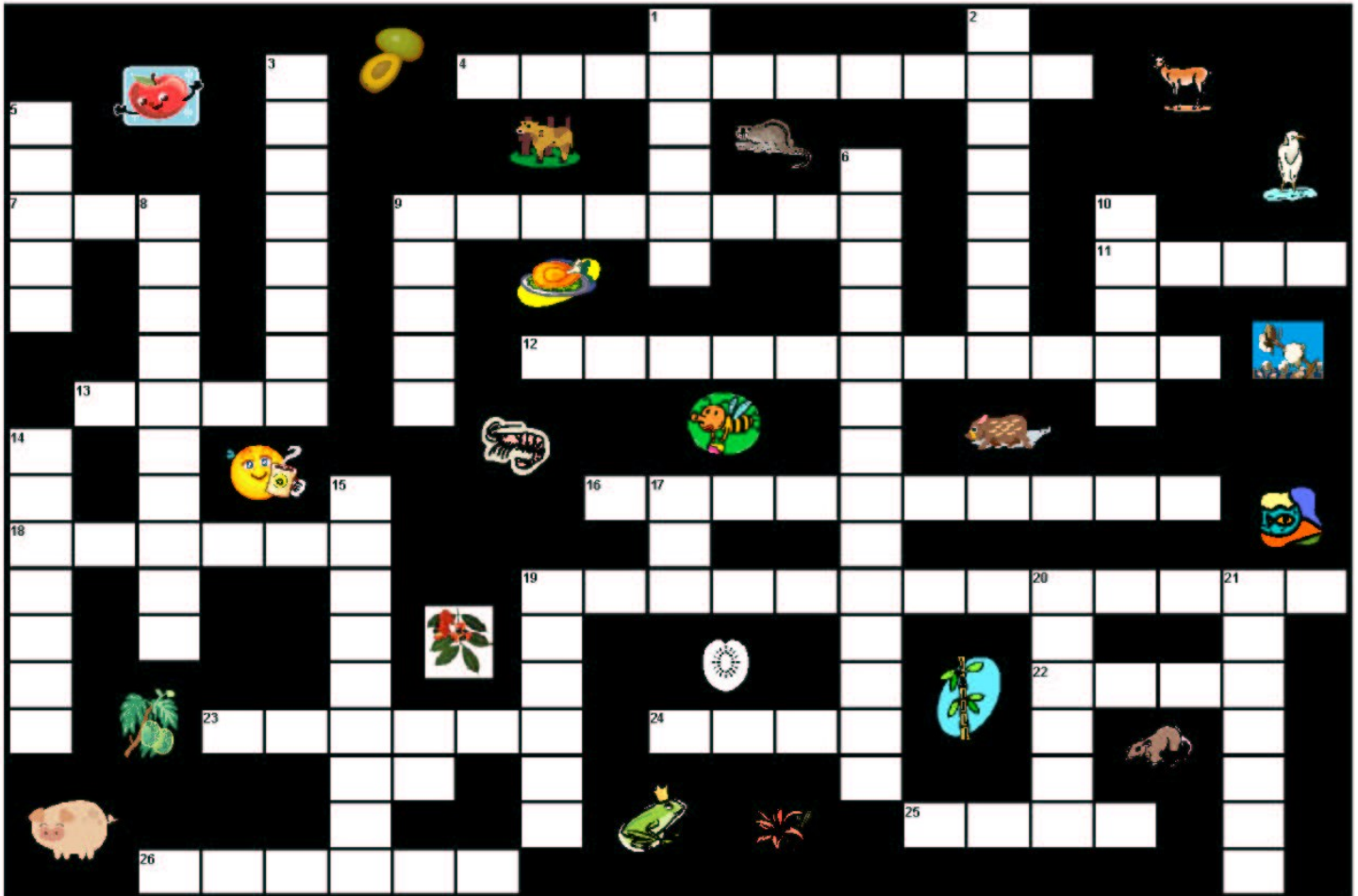
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Children's Corner



ACROSS

4. Used to clear sinuses and to aid in breathing
7. My dishes are loved by many Jamaicans
9. Introduced to control rats in sugarcane fields
11. Young cow
12. Often seen hitching a ride on cattle
13. Found in Portland and known to drive Santa's sleigh
16. Introduced by Captain Bligh and often eaten with ackee and saltfish
18. Grass often termed 'sharp as a razor'
19. Blocks waterways and is used as animal feed
22. Another word for chicken
23. Used to make a drink around Christmas time
24. Tree that "runs" flies, mosquitoes and other insects
25. Makes honey and stings
26. Tree used to make boats, coffins, shirts and is linked to the dead

DOWN

1. Used to make furniture and my name, Holland _____ is an attraction in St. Bess
2. Spotted animal with "warts" and is identified by its call "rrr rrbbit"
3. Relative of pig gone wild
5. Otaheite or American
6. Popular spicy food sold in Middle Quarters, St. Elizabeth
8. I am a plant and the first part of my name is a spice used in food and drinks
9. "Beefy" and "Stringy" are examples
10. National fruit
14. Provides dye and a famous brand of honey has this name
15. Looks like an elongated breadfruit
17. Frequent passenger on ships and loves cheese
19. A plane was lodged in these trees after Hurricane Gilbert
20. Attacked by the Berry Borer
21. Red and black aquaculture fish

- ANSWERS**
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|--------|-------------|--------------|---------------|----------|--------------------|--------|----------------|-----------|-----------|----------|------------------|----------|------------|---------------|----------------|------------|------------|--------------------|------------|-------------|----------|------------|----------|----------|------------|
| 1. Rat | 2. Bullfrog | 3. Wild Boar | 4. Eucalyptus | 5. Apple | 6. Peppercd Shrimp | 7. Fig | 8. Ginger/Lily | 9. Guinea | 10. Ackee | 11. Calf | 12. Cattle Egret | 13. Deer | 14. Willow | 15. Jackfruit | 16. Breadfruit | 17. Rrrbit | 18. Guinea | 19. Water Hyacinth | 20. Coffee | 21. Tilapia | 22. Fowl | 23. Sorrel | 24. Neem | 25. Bees | 26. Bamboo |
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The Aliens of Xamayca is a quarterly newsletter that features non-native species in Jamaica. Persons interested in writing articles for the newsletter may submit them to the editor at samantha.grant@nepa.gov.jm.