

# Leveraging the Power of Technology to Connect with Wildlife Using iPads



by **Colleen Tonkovic** | Education Coordinator  
Disney's Animal Kingdom® | USA

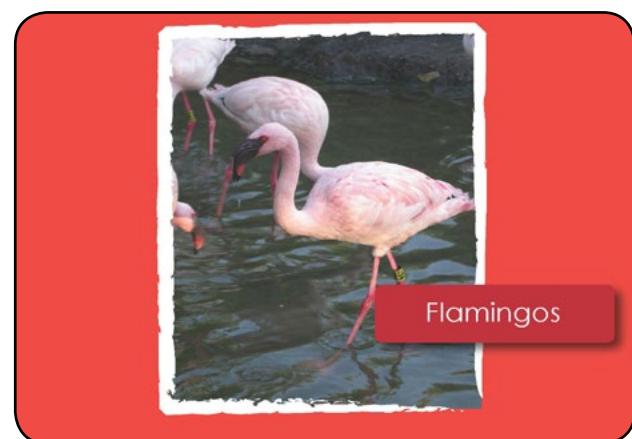
The observations from the Melbourne Zoo's article "Can iPads Enhance Environmental Education?" paralleled our experiences at Disney's Animal Kingdom®. As educators, we know that families with children are always looking for fun and engaging ways to learn about wildlife. Visiting a zoo or aquarium, going for a nature walk, and camping have traditionally been popular activities for families. But today, children's attention is drawn indoors more dramatically than ever before through the use of video games, movies, social networking, the internet, and television. Technology is a prime form of entertainment in many households and it dominates children's time on a daily basis sometimes upwards of 7.5 hours a day<sup>1</sup>. Studies have also shown that in a typical day, one in 10 (11%) 0- to 8-year-olds uses a smartphone, video iPod, iPad, or similar device to play games, watch videos, or use other apps. Those who do such activities spend an average of 43 minutes a day doing so.<sup>2</sup> But what if there was a way to combine a little fresh air and the popular world of technology?



*Emily Young, Education Coordinator, lets a young guest select the best answer to the question of what a flamingo eats.*

At Disney's Animal Kingdom®, innovation and technology collide in a fun and interactive experience for our guests. The use of Apple iPads have become one of the most popular ways to connect our guests to the animals while also inspiring them to take positive action. As educators, we constantly look for new ways to raise our guests' curiosity and engage them. Recently, we started a new guest program and began thinking about incorporating unusual methods to convey messages. iPads were one suggestion. Although we were a bit sceptical around the use of technology, we decided to pilot their use and record guests' reaction to them. We wanted to reach a large number of guests at our Discovery Island section of Disney's Animal Kingdom®, focusing largely on five species including flamingos, Asian small-clawed otters, lemurs, lappet-faced vultures, and cotton-top tamarins.

Seeing wild animals up-close is an amazing experience in itself, and one that, on a daily basis, our guests may or may not experience. Children are amazed that a tiny cotton-top tamarin can leap almost 15 ft. (4.5 m), or that a lappet-faced vulture has a wingspan of 9 ft. (2.75m), but they may never see it during the few minutes they are in front of the exhibit. Through iPads, we can share those moments captured in photos or on video.



We wanted to find a way to increase our guests' knowledge of the animals by incorporating an interactive component. Using the Keynote app, Apple's version of Microsoft's PowerPoint, we designed interactive Species Stories as an activity for families with children of all ages. Each Species Story is staff-directed, conducted in front of the animal exhibit, and designed to last only about 5 minutes. They were developed for young guests; however, educators have found that they are easily adaptable for teens and adults. The stories contain natural history information about the animal including habitat, diet, physical and behavioural adaptations. We also include an image of a training session or enrichment item to highlight our mission of delivering excellence in animal care. And, of course, each story ends with a conservation action guests can take to help wildlife at home. To increase the dynamics of this short interaction, we also added animal vocalizations, where appropriate, into the story which surprises and delights our guests.

After each picture, guests are asked a question related to the topic, and using touch-technology, they are able to select one response from a choice of five. Once their answer is chosen, the correct response "twinkles". The Species Story incorporates a "hook, content, message" approach using a fun method that children and adults alike enjoy.

Where do flamingos live?

- savanna
- tundra
- desert
- ocean
- lakes and lagoons



Flamingos live in inland lakes and lagoons and depend on their habitat for food, water, and shelter.

What do flamingos eat?

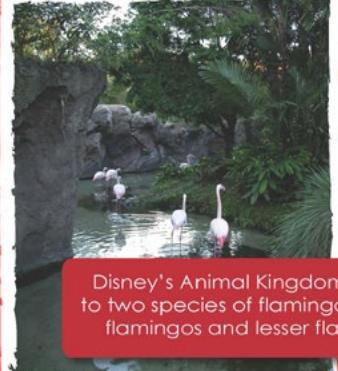
- smaller birds
- algae and shrimp
- pizza
- grass
- fish



Flamingos get their pinkish color from their diet!

How does a flamingo eat?

- filtering food
- at a buffet
- they get take out
- with a straw
- spoon and fork



Disney's Animal Kingdom is home to two species of flamingos, greater flamingos and lesser flamingos.

## Was the iPad Test Successful?

Although we didn't conduct a qualitative evaluation, we were very excited to read Melbourne Zoo's assessment. Using a quantitative approach, we found that both guests and our educators are thrilled with the iPad experience. Our educators especially enjoy using this technology which shows off their skills and the capabilities of the iPad. One reason the educators enjoyed using iPads was that guests were attracted by the iPad and iPads were effective in holding guests' attention. So, truly they made the educator's job much easier in hooking guests into a conversation and engaging them through the conservation message. Here are a few comments by our guests and staff:

### Disney Animal Kingdom® Guests

"It's nice to see zoos and conservationists use technology. It helps children want to learn, especially since some are out of touch with nature. They are more willing to learn using the iPad!"  
"My kids loved getting to pick which answer they thought was right! Very interactive."  
"Very hands-on and interactive. My kids really enjoyed it!"

### Disney's Animal Kingdom Education Presenters

"The iPad bridges the gap between learning and technology for younger children." –Jay  
"It's a really great tool to use, especially when animals are not easy to see." –Taylor  
"I use the iPads a lot to help the younger children find the animals!" –Will  
"It's great for families who want to spend a little more time learning about the animals." –Arielle

With guests and educators enjoying the iPads, we have been reaching large numbers of guests. Since we began using iPads in February 2012, we have been reaching on average 35,000 guests monthly. This number has exceeded our expectations and we will consider using iPads in other animal exhibit areas to engage our guests.

In conclusion, technology can be an important tool for both longer, in-depth programs and for shorter exhibit interactions. As conservation educators, we can leverage the power of technology to connect with wildlife and to inspire conservation action in our guests. The motivation to learn about our amazing and beautiful wild animals in zoos and aquariums is enhanced by incorporating technology as an innovative teaching method. Go ahead and try it!



<sup>1</sup> Kaiser Family Foundation Report ([www.kff.org/entmedia/mh012010pkg.cfm](http://www.kff.org/entmedia/mh012010pkg.cfm)), January 20th, 2010.

<sup>2</sup> Zero to Eight: Children's Media Use in America ([www.commonsensemedia.org/research/zero-eight-childrens-media-use-america](http://www.commonsensemedia.org/research/zero-eight-childrens-media-use-america)).

A Common Sense Media Research Study, October 25, 2011.