

**ENVIRONMENTAL COMMITTEE MEETING**  
**Kiawah Island Municipal Center**  
**Council Chambers**  
**January 12, 2016; 1:30 PM**

**Minutes**

- I. **Call to Order:** Mrs. Johnson called the meeting to order at 1:30 pm.
- II. **FOIA:** Notice of this meeting has been published, and posted in accordance with the Freedom of Information Act and the requirements of the Town of Kiawah Island.

III. **Roll Call:**

Present:	Mary Johnson
	David Elliott
	Jim Chitwood
	Jim Sullivan
	Sandra Williams
	John Leffler
	Robert Simmons
KICA:	Matt Hill
KIGR:	Liz King
KINHC:	Jack Kotz
	Justin Core
TOKI:	Jim Jordan
	Aaron Given
	Stephanie Tillerson
Absent:	Marilyn Olson
	Jane Ellis
	Lynette Schroeder
ARB:	Amanda Mole
	Dave Achey

IV. **Approval of Minutes:**

- A. Environmental Committee Meeting Minutes of May 4, 2015

*Mr. Jordan made a motion to approve the minutes of the May 4, 2015 Environmental Committee meeting. The motion was seconded by Mr. Kotz and was unanimously approved*

V. **Chairman's Comments:**

None

VI. **Old Business**

None

VII. **New Business**

- A. *Kiawah Nature Guide Update --*

Mr. Jordan stated the *Kiawah Nature Guide* was created and printed in 2011 using Environmental Committee (EC) funds. The guide is distributed free of charge at the Visitor's Center, Town Offices, Night Heron Park Nature Center and the Sandcastle.

Mr. Jordan indicated there are only have 100 copies remaining out of 5,000 that was originally ordered in 2011 and questioned if the guide should be revised or reprinted as is. Cost in 2011 was approximately \$1 per booklet.

Discussion included the addition of more pages on Island birds to the guide or to create a separate bird book. A suggestion made to add a small number of pages and print a small number now, make revisions to the guide and print a larger number at a later date. Mr. Jordan stated a small number of guides printed would drive the cost up but felt an additional 5000 copies would be distributed fairly quickly.

***Mr. Jordan made a motion to print 5000 Kiawah Nature Guides "as is" doing an evaluation for the 2016/2017 year. The motion was seconded and unanimously passed.***

#### **B. Alligator Research Update**

Alligator Research 2015-2016 is a cooperative research project between Town, Conservancy, and KICA. Mr. Kotz gave a brief history of the sampling the alligator population on Kiawah Island that began about a year ago by Professor Lou Guillette of MUSC and his team. Professor Guillette indicated "The alligator population on Kiawah Island is a unique and exceptional resource for expanded studies on basic crocodylian biology". Although tragically Lou Guillette died in August 2015, his team reorganized and carried on.

In the first season of work, the group caught 32 animals from which they took blood, urine samples and skin samples that were analysis for heavy metals, pesticides, and hormone concentrations. In addition, they removed 41 eggs from one nest, hatched the eggs under controlled conditions in the lab, and, after taking blood samples, returned the hatchlings to the nest.

Alligator research on the Island will resume in March 2016 for at least one more season. Lou Guillette's son Matt will be involved as will Professor Thomas Rainwater of Clemson University. Objectives for 2016 include capturing about 40 animals with, they hope, a 50:50 sex ratio. They plan a larger contaminant analysis, blood chemistry, and analysis for metals and hormones. Finally, they will also make more nesting surveys and pay even more attention to education and public outreach.

The Environmental Committee provided \$5,000 toward project.

#### **C. Turtle Filming Project Update**

Turtle Filming Project is a cooperative effort between Town and Conservancy. Mrs. Johnson stated she attended the Turtle Filming symposium held last fall at the Sandcastle. She reported

the Conservancy presented the current film made in 2015, along with a film made in 1972 which portrayed work done at that time on capturing turtles and protecting eggs. The individuals that took part in the film were present at the symposium and noted some of the similarities as well as differences that have taken place over time.

The Environmental Committee provided \$10,000 toward project.

#### **D. Turtle Patrol Update**

Mrs. Johnson made the announcement that Mr. Joe Pezzullo was retiring and would no longer be the leader of the Turtle Patrol and Ms. Lynne Sager would be taking his place.

Mr. Jim Jordan gave a summary of the 2015 turtle nesting season;

- 321 Total Nests, includes 43 found by SCDNR (South Carolina Department of Natural Resources) on far eastern end
- Coyotes depredated 1% of nests this year compared to 21% last year and 7% in 2013  
*Mr. Jordan stated the decrease, as predicted, is due to the stabilization of the coyote population on the Island.*
- 67.6% hatching success
- 19,744 emerged hatchlings

Mr. Jordan stated the permit will transfer to Mrs. Sager as the new leader of the Turtle Patrol.

#### **E. Beach Erosion Update**

Mrs. Johnson stated the September 2015 Coastal Science and Engineering (CSE) 2006 EAST END BEACH RESTORATION PROJECT Survey Report No 8 that was sent to Committee members will be presented to Council for their review and posted on-line for public review.

Mr. Jordan gave an update on;

- **Beach Conditions**
  - Entire Beach suffered significant erosion during October and November 2015
    - Beach is not as bad as it looks
    - Beach projected to slowly recover during the next year
- **Beach Surveys and Reports**
  - CSE Survey Report received in September 2015 is for 2014 calendar year
  - Report Summary;
    - Beach remains healthy
    - *Island wide from October 2013 to October 2014, Kiawah gained 225,000 cy (3.9 cy/ft) of sand*
    - *Since 2007, the island has gained nearly 1.8 million cubic yards, measured to -10 ft NAVD. This is an average annual accretion rate of 4.4 cy/ft/year since 2007*
    - *Kiawah continues to be one of the healthiest beaches on the South Carolina coast, and monitoring results continue to suggest that this trend will continue in the near future.*
  - 2015 Report expected by mid-February 2016
- **Dune Breaches**
  - Breaches caused in area where boardwalks stop short of the dunes and walking pathways develop in the primary dune,
  - 8 developed following the October storm,

- Worst breach - Flyway (Lots 129, 133)
  - 100 foot wide breach in primary dunes
  - 2 boardwalks affected
  - Town has decided that no remedial action is necessary
  - Area is beginning to recover and rebuild naturally
  - KICA is investigating the possibility of seeking an OCRM permit to restore the dune in this area

Mrs. Johnson added that there were a number of walkovers damaged on the beach during the high tides and homeowners were sent letters to notifying them as to their walkover's status.

**F. Dolphin Conservation Education Internship**

Mr. Jordan stated the Dolphin Conservation Education Internship was established during a discussion of educational opportunities with the NOAA (National Oceanic and Atmospheric Administration) Education Coordinator last summer. He indicated the popularity of watching strand feeding dolphins in the Captain Sam's Spit has produced some less than ideal interaction between people, pets and the dolphins. The intern could educate visitors on dolphins and the correct way to interact with them but also monitor activities.

Kiawah Project;

- NOAA-Hollings Scholarship, 10 week internship on Kiawah, Intern is Genevieve Devine
- May 30 –August 7
- Dolphin education, primarily at Captain Sam's inlet
- Needs housing assistance
- Advantage to the Conservancy's Nature Center

**G. Fall Migration Banding Update –**

Mr. Given gave an update and summary of the 2015 Fall Migration Banding Project. He stated it was the seventh fall season banding birds at Captain Sam's Spit and the first fall season banding birds at Little Bear Island. New species never banded before included Green Heron, Black-billed Cuckoo, Saltmarsh Sparrow, Seaside Sparrow, and Lincoln's Sparrow.

BANDING STATISTICS	CAPTAIN SAM'S	LITTLE BEAR	TOTAL
# of Birds Banded	4,770	2,370	7,140
# of Recaptures	1,124	409	1,533
# of Species	83	70	94
Effort (net-hours)	12,115.8	3,552.4	15,668.2
Capture Rate (birds/100 net-hours)	48.6	78.2	55.4
# of Nets	25	16	41
# of Days Operated	98	57	-
Dates of Operation	8/15-11/30	9/7-11/17	-

Mr. Given explained bird banding trends and factors that effected to captured rates.

**H. Bobcat GPS Study Update**

Mr. Jordan gave a 2015 Project Bobcat GPS Study update and 2016 schedule.

- 2015 Bobcat GPS Project

- 6 bobcats collared, 2 collars recovered, 1 collar still working
- Bobcat 750 – Juvenile Male – Captain Sam’s Spit – First capture
  - Home Range includes Seabrook and western 2/3 Kiawah
  - Spent 6 weeks in July/August and October on Edisto Island, currently on Seabrook
- 2016 Bobcat GPS Project
  - 6 collars to be deployed
  - Kiawah Conservancy providing funding for collars
    - 2 new collars (\$5815)
    - 4 refurbished collars (\$2967)
  - Trapping to begin in late January 2016

**I. Sea Islands Christmas Bird Count –**

Mr. Given reviewed detail of this year’s annual Sea Islands Christmas Bird count conducted on January 4, 2016. He explained the count is conducted by counting all the birds in a pre-designated 15 mile circle that includes Kiawah, Seabrook, Wadmalaw and most of Johns Island. He indicated that participation increased this year including residents from Kiawah and Seabrook. This year’s results include;

- 158 species
- 21,525 individuals
- 55 participants
- New species added to the count included Parasitic Jaeger, Northern Rough-winged Swallow, and Baltimore Oriole.
- Species missed included American Pipit, American Woodcock, Painted Bunting, and Vesper Sparrow

	2012	2013	2014	2015	2016
# of Species	132	146	154	159	158
# of Individual	19,029	22,652	24067	41,096	21,525
# of Participants	23	46	51	45	55

**VIII. Reports:**

**A. Kiawah Island Community Association Land & Lakes Management – Matt Hill**

Mr. Hill reported on the activities on the Island explaining the process of the lake “turning over” producing an odor due to the natural production of hydrogen sulfide that comes to the surface of the water.

**B. Kiawah Island Golf Resort- Liz King**

Ms. King stated the Nature Center is visited by 20 to 30 school classes annually. She indicated distribution of the Turtle Patrol video to students prior to their visit would be very advantageous to the experience.

**C. Kiawah Island Architectural Review Board – Amanda Mole**

Mrs. Johnson indicated that the Board was very active with the remodeling and new construction in Ocean Park and Cassique.

**D. Environmental Science Committee – Jack Kotz**

Mr. Kotz reported the next speaker for the Our World program would be geologist Leslie Sautter, from the college of Charleston, speaking on Carolina's coast.

Mr. Core reported on January 28<sup>th</sup> the Conservancy's Conservation Matters include a dolphin presentation from Wayne McFee with the NOAA Charleston Laboratory (National Oceanic and Atmospheric Administration).

**IX. Correspondence:  
None**

**X. Citizen Comments:**

**Linda Leffler – Inlet Cove HOA President**

Mrs. Leffler reported that following the annual meeting she was approached by residents concerned by the current Town dog ordinance. She requested the Environmental Committee review the ordinance and consider a modification to the ordinance. She presented a proposal to would allow dogs off leash one-half hour before the opening of Beachwalker Parks and one-half hour after the closing of the Beachwalker Park in the area west of the Park for the Committee's consideration.

*The map is amended to reflect that the western end of the beach "known as Beachwalker County Park" be designated a "Dog Use Area" during the period of March 16 to October 31 from one half-hour after the close of the park's parking lot until one-half hour prior to the opening of the park's parking lot. At other times of the day during that period it shall be designated as a Dog Leash Area. This amendment is effective xxxxx xx, 2016.*

Mr. Jordan gave a brief history of the changes to the beach pet restriction history;

- **Prior to 2005** – Pets were allowed unleashed on both the east and west ends, middle portion was seasonal dog leash
- **2005** – Critical habitat areas were designated on east and west ends of island. East end was no dogs allowed, west end was dogs on leash
- **2009** – Council changed regulations in response to several negative dog-human interactions on the beach. The 2 biggest changes were that the west end critical habitat area changed to "no dogs allowed" from "dogs on leash year round" and the middle beach changed from dogs being off leash seasonally during winter to dogs having to be on leash year round.
- **August 2010** – Council, in response to public input focusing on the middle beach portion, returned the middle beach portion to seasonal use but also changed the west and east end "no dog areas" by adding a new "dog on leash year round zone" within each.
- **May 2013** – "Dog on leash year round" areas on east and west end removed.
- **November 2014** – West End Dog off Leash area removed in response to large numbers of dogs and violations adjacent to Beachwalker County Park and at Captain Sam's inlet. Also voice control stipulation changed to "under control".

Mr. Jordan stated during the time from November to March dogs are allowed to be off-leash and there was a section of the beach in which you could have your dog off leash year-round.

Members listened to the residents' concerns as well as Mr. Jordan tried to provide further clarification of the current ordinance. Members agreed to discuss the issue further at the March Committee meeting.

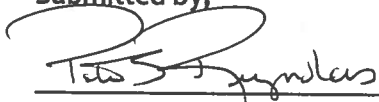
XI. **Committee Member Comments:**

David Elliott suggested that Committee study the evidence of rising ocean levels and the possible long-term effects on the marsh side of the Island.

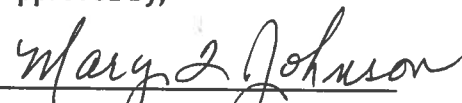
XII. **Adjournment:**

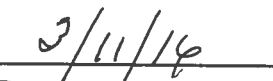
*The meeting was adjourned at 3:00 pm.*

Submitted by,

  
\_\_\_\_\_  
Petra S. Reynolds, Town Clerk

Approved by,

  
\_\_\_\_\_  
Mary Q. Johnson, Chairman

  
\_\_\_\_\_  
Date