



## Memorandum

To: Andrew Schumacher,  
Chief Operating Officer

From: Jim Griner  
Chief of Security

Date: December 30, 2019

Re: Deer Culling

### Summary:

During approximately October/November, 2019, you asked me to evaluate the process of conducting a deer culling in Palmetto Dunes. It was my understanding that interest in conducting a deer culling was due at least partially to the following:

- Complaints from property owners regarding deer damaging personal property (ornamental vegetation);
- Potential safety concern from property owners, as an increase in the deer population could result in an increase in motor vehicle collisions with deer.

The following steps were completed as part of my assessment:

1. Reviewed memorandum from Ben Brown dated August 18, 2014, re: Deer Management Program
2. Reviewed the General Deer Spotlight Survey Protocol from Folk Land Management
3. Reviewed surveys from Folk Land Management dated 2014, 2016, 2017 and 2019.
4. Conducted telephone interview with Folk Land Management
5. Conducted telephone interview with David Henderson
6. Conducted telephone interview with South Carolina Department of Natural Resources (SCDNR)
7. Reviewed Hilton Head Island Ordinances regarding discharging of firearms
8. Discussed deer culling with Hilton Head Island Assistant Town Manager, Josh Gruber
9. Experience/Education/Reference for David Henderson.



Details:

1. On August 18, 2014, Ben Brown prepared a memorandum to you regarding a deer management program for Palmetto Dunes (see attached, Exhibit A). The memorandum summarized the deer culling process and resulted with a recommendation to contract Folk Land Management to conduct a deer survey.
2. According to the Folk Land Management General Deer Spotlight Survey Protocol (see attached, Exhibit B), multiple night surveys are conducted to provide a representative sample of the deer in a given area.
3. According to surveys conducted by Folk Land Management during 2014, 2016, 2017 and 2019 (see attached, Exhibit C), the following data was provided:

Survey Data

Date	Bucks	Does	Fawns	Unidentified	Total	Acres/Deer
9/30/2014	0	2	7	1	10	7.8
10/1/2014	4	0	7	5	16	4.9
8/7/2016	8	14	6	0	28	2.8
8/18/2016	4	9	5	1	19	4.1
8/30/2017	5	8	6	1	20	3.9
8/31/2017	1	4	3	0	8	9.8
10/22/2019	2	11	9	1	23	3.4
10/23/2019	5	13	10	0	28	2.7

Population Parameters

Date	Does/Bucks	Fawns/Doe	Herd Increment	Avg. % Unidentified
2014	7	0.43	0.38	15%
2016	1.1	0.85	0.44	2%
2017	2	0.8	0.5	4%
2019	3.4	0.79	0.61	1%

4. During November/December 2019, I spoke with Dean Harrigal, who is a certified Wildlife Biologist and employed by Folk Land Management in Green Pond, SC. According to Dean, he worked for SCDNR for 28 years (primarily as a wildlife biologist) prior to his employment with Folk Land Management. Dean stated that Folk Land Management has been providing land management planning services in South Carolina for approximately 30 years and conducts approximately 10 deer surveys annually. These surveys are primarily conducted in the Beaufort County area. According to Dean, the scope of their work is strictly related to the survey and not the culling. However, Dean stated that they have exclusively recommended David Henderson to communities in Beaufort County for the purposes of conducting deer cullings. Dean stated that



David is recommended because he is from the area of Hilton Head and is familiar with the property. Dean further stated that David has 20 years of experience and is a certified Wildlife Biologist.

5. During November/December 2019, I spoke with David Henderson who stated that he has been contracted by numerous communities since 1999 to conduct deer cullings/harvests. During this time, David stated that he has successfully culled approximately 5,000 deer without incident. David stated that the culling process begins with a review of the property so that an area for the culling can be identified. Once identified, David described a baiting process to lure the deer to the culling area. Preparation for this typically begins one week in advance of the culling. Some of the factors that may affect the culling include wind, rain and temperature. Once the deer are located in a culling area, David stated that he focuses on culling deer who are seven to nine months of age.

David stated that he uses suppressed long rifles to cull the deer. In the case of Palmetto Dunes, he recommended a suppressed .223 long rifle. David described other methods for culling deer, such as bow and arrow, traps, nets and tranquilizers, but stated that he does not offer these methods of culling. David stated that the ability to use a firearm prevented the deer from running and having to be located elsewhere. The recommended time for culling deer was provided as late evening to early morning, with all deer being collected and removed from the property as early as possible. David stated that he would need assistance from PDPOA security personnel to escort him through the property during the culling and that the firing of the long rifle would most likely occur from a vehicle (possibly the back of a truck). David stated that he has a 95-98% shot ratio, with 2-4% being a clean miss. He further stated that less than 1% of the deer are not able to be located after being shot. David stated that his point of aim is for the head/neck area which generally results in immediate death without the deer being able to run away. David also stated that he has never had any instance where property damage or other safety related incidents have occurred during his experience culling deer. Once the deer are collected, David stated that the deer are relinquished to a processor and the meat has to be donated to an organization such as Deep Well or a food bank. David charges \$100 per deer and stated that a processor charges approximately \$75 per deer.

6. During approximately November/December 2019, I spoke with Charles Ruth of SCDNR. Ruth described the process for obtaining the necessary permit and tags for a deer culling. He further stated that deer culling permits are only valid during January and February of each year. Ruth stated that some of the common requests for deer culling include damage to ornamental vegetation and the concern for tick-borne diseases.

7. Listed below is the Hilton Head Island Code of Ordinance related to the discharge of firearms (see attached, Exhibit D):

Sec. 17-5-111. – Discharge of firearms prohibited except as noted.

It shall be unlawful to discharge firearms within the town except as hereinafter provided:



- (1) Police officers or certified private security officers, operating in the line of duty, who are authorized to carry firearms;
- (2) In areas approved by the town manager as practice ranges or for sport shooting; and
- (3) For hunting small game, namely, squirrel, rabbit, dove and quail, using shotguns with shot only.

8. During December 2019, I called Josh Gruber who is the Assistant Town Manager for Hilton Head Island. The purpose in my call was to discuss the deer culling process and my concern that it violates Section 17-5-111. During our conversation, it was my understanding that the town would not pursue any action for private communities who conduct a deer culling so long as the proper authorization was granted by SCDNR.

On December 11, 2019, I emailed Josh to confirm my understanding of our conversation (see attached, Exhibit E). On December 12, 2019, Josh responded to my email and confirmed my understanding (See attached, Exhibit F).

9. On December 30, 2019, David Henderson provided the following information via email regarding his education/experience:

“ I received my BS (1995) and MS (1998) in Forest Resources with a concentration in wildlife management from the University of Georgia. My thesis, “Responses of Urban Deer and Perceptions of Residents to a 50% Reduction in Local Herd Density” examined the inherent conflicts presented when high densities of deer coexist with high numbers of humans. My thesis produced two peer reviewed professional publications and three professional presentations. In 2003 I received Certified Wildlife Biologist accreditation from the Wildlife Society.

After graduating in 1998 I became employed by a gated community on Hilton Head Island, a position I hold to the present day. I also provide deer management services on a consulting basis. Since 1999 I have safely, humanely and efficiently removed approximately 5,000 deer from sixteen South Carolina communities and two out of state communities. I have obtained extensive experience over the past twenty years and have a proven track record of achieving program objectives while professionally operating within complex environments.”

David further provided the following references:

- Hilton Head Plantation;
- Sea Pines Plantation;
- Indio Run; and
- Berkeley Hall



## Conclusion:

Palmetto Dunes POA has received complaints/concerns regarding the deer population in Palmetto Dunes. Specifically, property owners have voiced their complaints/concerns regarding damage to ornamental vegetation that is caused by deer feeding on their property. During recent years, there have been no significant amount of reported vehicle accidents in Palmetto Dunes with respect to deer.

Since 2014, Palmetto Dunes POA has completed four deer surveys. At the conclusion of the 2019 survey, Folk Land Management stated that the deer density for Palmetto Dunes was high and recommended a harvest of 25 deer. On behalf of Palmetto Dunes POA, Folk Land Management has made application to SCDNR to receive a permit and tags for a deer culling in January-February 2020. Said application was made in advance of board approval due to permitting constraints. The issuance of the permit and tags does not mandate that a culling must occur.

Folk Land Management has recommended a service provider to conduct the deer culling and the total costs should not exceed \$5,000. The method used for harvesting the deer by the recommended service provider is a suppressed .223 long rifle.

Should the board decide that a deer culling is necessary, considerable discussion is recommended regarding the use of a firearm in a densely populated area.



## MEMORANDUM

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TO: Andrew Schumacher, Chief Operating Officer  
FROM: Ben Brown, Principal Planner & Project Manager  
RE: Palmetto Dunes Deer Management Program  
DATE: August 18, 2014

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### Background:

PDPOA has received feedback from owners and staff that there are an increasing number of deer in the resort. Particular concerns have been expressed regarding deer eating ornamental plants in people's yards and on PDPOA property and the potential danger to motorists from the growing deer population. Since March, PDPOA management has been talking with other HHI communities and wildlife consultants about the process for implementing a deer management program. The following is a summary of our finding.

- David Henderson was repeatedly recommended as a valuable resource
  - David started working on a Sea Pines deer management program while attending graduate school in the mid-1990s
  - Fulltime CSA employee from 1998 – present
    - Director of Special Projects / Certified Wildlife Biologist
    - Deer sharpshooter
  - David recommended PDPOA contact Folk Land Management
  
- Folk Land Management (Woodland & Wildlife Consultants)
  - Folk conducts deer spotlight surveys in late summer, after Labor Day
  - After the spotlight survey, they analyze the findings and prepare a report. The report would be provided to PDPOA and SCDNR. If Folk concludes there are too many deer per net acre in the resort, they would recommend a harvest and facilitate all permitting with SCDNR. Upon SCDNR's approval, PDPOA would hire a sharpshooter (David Henderson) or conduct the harvest in house (I'm not recommending this).

- In July, Folk prepared a proposal to conduct a spotlight survey in Palmetto Dunes and facilitate conversations with SCDNR, including associated permitting for an estimated cost of \$1,900.
  - Palmetto Dunes' spotlight survey is tentatively scheduled for the nights of September 29 and 30. Leamington is scheduled for September 30 and October 1.
- Culling Program
- If Folk Land Management's findings conclude that Palmetto Dunes has too many deer per net acre, they will recommend a harvest and facilitate all permitting with SCDNR.
  - Folk's report would recommend the number of deer to harvest.
  - SCDNR permitting could be secured in as few as two weeks based on the report.
  - A permit would enable PDPOA to harvest deer until March, 2015.
  - David Henderson estimates that based on the size of Palmetto Dunes and lack of a deer management program, we may need to harvest 50 to 100 deer.
  - David offered to provide a 45 minute presentation regarding the importance of deer management.
  - David would harvest the deer in two to three nights.
  - David would coordinate with a processor to collect the deer during the nights of the harvest.
  - Meat would be donated to charity as it is a violation of State Law to sell.
  - Every year thereafter, our consultants would conduct a spotlight survey in late summer and if necessary recommend a maintenance culling.
  - David charges \$100 per deer harvested; this includes his pre-consultation services.
  - Processing costs about \$65 per deer.

**Recommendation:**

Based on the above findings, I recommend **Approval of \$1,900 for Folk Land Management to conduct a spotlight survey and prepare a report with their recommendation.** We could then review this report with David Henderson before making a recommendation to our Board of Directors in October.

Ex. B

## General Deer Spotlight Survey Protocol

Dean Harrigal, Certified Wildlife Biologist  
Folk Land Management, Green Pond, SC

Spot light surveys are utilized to estimate deer density on a given area by observing deer at night along a predetermined route and utilizing a known area of visibility to calculate estimated number of acres- per-deer seen during the survey. Spotlight surveys are not designed to count a total deer population but to sample a representative sample of an area and the deer numbers found there. Multiple counts along a repeated route provide for more reliable information on deer density. From over 25 years of experience, Folk Land Management has determined that two consecutive nights during annual surveys provide reliable information while remaining cost effective. Repeated annual surveys provide long term information (an index) about deer densities on an area.

Surveys are conducted along a standardized predetermined route utilizing existing all-weather roads and trails representing a sample of the landscapes on a particular property. Routes are designed to minimize double counting of individual animals and to efficiently cover area.

Surveys are conducted at night by at least two observers stationed in the back of a pick-up truck (driven at 10 mph) utilizing spot lights to locate deer along the survey route. The observers shine their lights only on the side of the truck they are located. When a deer is spotted (usually by eyeshine) the truck is halted and the deer is identified as male, female, fawn or unidentified and data recorded. The number seen along a given route is then tallied.

Observed acreage is calculated along a route by estimating the distance that observers can spot deer every 1/10 of a mile during a survey. This is typically done in conjunction with the first nighttime survey. The distance estimates and survey route length are then plugged into a formula to calculate the acreage surveyed. By using a standardized route this survey acreage remains relatively constant over the long-term.

Data is then analyzed is to calculate the deer density for the area surveyed, along with population parameters including doe/buck ratio, fawn/doe ratio, herd increment, and percent of unidentified deer.

This information is utilized along with other factors (such as landscape damage and deer/vehicle incidents) to make recommendations for herd management on a given area.

**Reference: S. Jester and Dillard J. Conducting Deer Spotlight Surveys in the Cross-Timber and Prairies Region of North and Central Texas, Texas Parks and Wildlife**

Ex. C1



FOLK LAND MANAGEMENT, INC.  
WOODLAND & WILDLIFE CONSULTANTS

3515 White Hall Road  
Green Pond, S.C. 29446

info@folklandmanagement.com  
http://folklandmanagement.com

Office: (843) 844-2290  
Fax: (843) 844-8231

October 24, 2017

Mr. Ben Brown  
Palmetto Dunes  
4 Queens Folly Road  
Hilton Head Island, SC 29928

Dear Mr. Brown,

We conducted our deer spotlight survey on Palmetto Dunes on August 30 and 31, 2017.

The results are presented below:

Date	Bucks	Does	Fawns	Unidentified	Total	Acres/Deer
9/30/14	0	2	7	1	10	7.8
10/1/14	4	0	7	5	16	4.9
8/17/16	8	14	6	0	28	2.8
8/18/16	4	9	5	1	19	4.1
2016 Harvest: 0 Deer						
8/30/17	5	8	6	1	20	3.9
8/31/17	1	4	3	0	8	9.8

Date	Does/Bucks	Fawns/Doe	Herd Increment	Average % Unidentified
2014	7.0	.43	.38	15%
2016	1.1	.85	.44	2%
2017	2.0	.8	.50	4%

Ex. C2

Based upon our survey, deer density appears to remain high on Palmetto Dunes. Surprisingly, landscape damage and deer-vehicle accidents must not be perceived as a problem since you have not conducted a harvest. If too many deer become a problem for the community, please call us to discuss requesting a permit from SCDNR for a residential deer harvest permit.

Regards,



Robert H. Folk III

Cc: Charles Ruth, SCDNR  
David Henderson

Ex C3



FOLK LAND MANAGEMENT, INC.  
WOODLAND & WILDLIFE CONSULTANTS

3515 White Hall Road  
Green Pond, S.C. 29446

info@folklandmanagement.com  
http://folklandmanagement.com

Office: (843) 844-2290  
Fax: (843) 844-8231

November 4, 2019

Mr. Ben Brown  
Palmetto Dunes  
4 Queens Folly Road  
Hilton Head Island, SC 29928

Dear Mr. Brown,

Folk Land Management conducted a deer spotlight survey on Palmetto Dunes on October 22 and 23, 2019. Based upon our survey, the deer density appears to remain high on Palmetto Dunes. The highest estimate of deer density for this survey period was calculated at 2.7 acres/deer on October 23. If too many deer become a problem for the community, please feel to contact us to discuss requesting a permit from SCDNR for a residential deer harvest.

Regards,

Dean Harrigal  
Certified Wildlife Biologist

Cc: Charles Ruth, SCDNR  
David Henderson

Ex. C4

**Survey Data**

<b>Date</b>	<b>Bucks</b>	<b>Does</b>	<b>Fawns</b>	<b>Unidentified</b>	<b>Total</b>	<b>Acres/Deer</b>
9/30/14	0	2	7	1	10	7.8
10/1/14	4	0	7	5	16	4.9
8/17/16	8	14	6	0	28	2.8
8/18/16	4	9	5	1	19	4.1
2016 Harvest: 0 Deer						
8/30/17	5	8	6	1	20	3.9
8/31/17	1	4	3	0	8	9.8
<b>10/22/19</b>	<b>2</b>	<b>11</b>	<b>9</b>	<b>1</b>	<b>23</b>	<b>3.4</b>
<b>10/23/19</b>	<b>5</b>	<b>13</b>	<b>10</b>	<b>0</b>	<b>28</b>	<b>2.7</b>

**Population Parameters**

<b>Date</b>	<b>Does/Bucks</b>	<b>Fawns/Doe</b>	<b>Herd Increment</b>	<b>Average % Unidentified</b>
2014	7.0	.43	.38	15%
2016	1.1	.85	.44	2%
2017	2.0	.8	.50	4%
<b>2019</b>	<b>3.4</b>	<b>.79</b>	<b>.61</b>	<b>1%</b>

Ex. D

Sec. 17-5-111. - Discharge of firearms prohibited except as noted.

It shall be unlawful to discharge firearms within the town except as hereinafter provided:

- (1) Police officers and certified private security officers, operating in the line of duty, who are authorized to carry firearms;
- (2) In areas approved by the town manager as practice ranges or for sport shooting; and
- (3) For hunting small game, namely, squirrel, rabbit, dove and quail, using shotguns with shot only.

(Ord. No. 85-10, § 1, 5-20-85)

**From:** James Griner  
**Sent:** Wednesday, December 11, 2019 11:39 AM  
**To:** joshg@hiltonheadislandsc.gov  
**Cc:** Andrew Schumacher  
**Subject:** Follow-up

Good morning Josh,

Thank you for taking my call last week regarding our deer population in Palmetto Dunes. As discussed, our organization recently contracted with a wildlife management consultant for the purpose of conducting a deer survey. In fact, in addition to 2019, we have also conducted deer surveys in 2014, 2016, and 2017. These were completed primarily due to complaints from our property owners regarding our deer population. The findings of our most recent survey resulted with a recommendation that 25 deer should be harvested.

It is my understanding that other communities on Hilton Head Island have contracted with a service provider who utilizes suppressed firearms (not shotguns) for the purpose of fulfilling the culling. As discussed during our phone conversation, my concern is that this process most likely violates the per se town ordinance of discharging a firearm within the town limits of HHI. However, based on our conversation, it is my understanding that the town will not pursue any legal action for those communities who knowingly violate Section 17-5-111 so long as they have received approval from SCDNR and are in possession of the proper credentials from SCDNR to conduct said culling. In other words, communities within the Town of HHI would be exempt from said ordinance based upon possession of valid credentials from SCDNR to conduct a deer culling.

If this is correct, can you please confirm? Before we consider any further action, I want to make sure that we are in full compliance with all applicable laws, procedures, best practices, etc. and that we have the support from the Town of HHI to complete a deer culling by contracting with a service provider who utilizes suppressed firearms (not shotguns).

Best,  
Jim



**Jim Griner**  
Chief of Security  
Palmetto Dunes Property Owners Association  
p: 843-765-1120 | c: 843-301-0022 | [www.pdpoa.org](http://www.pdpoa.org)

Ex.F

**James Griner**

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**From:** James Griner  
**Sent:** Thursday, December 12, 2019 11:26 AM  
**To:** Gruber, Josh  
**Cc:** Andrew Schumacher  
**Subject:** RE: Follow-up

Thanks Josh, we appreciate your cooperation with this matter!



**Jim Griner**  
**Chief of Security**  
Palmetto Dunes Property Owners Association  
p: 843-785-1120 | c: 843-301-0022 | [www.pdpoa.org](http://www.pdpoa.org)

**From:** Gruber, Josh <joshg@hiltonheadislandsc.gov>  
**Sent:** Thursday, December 12, 2019 9:26 AM  
**To:** James Griner <jgriner@pdpoa.org>  
**Cc:** Andrew Schumacher <ASchumacher@pdpoa.org>  
**Subject:** RE: Follow-up

Good morning, Jim:

You have accurately restated the contents of our conversation. The Town has previously taken the position that any wildlife management actions undertaken within any of the private communities on the Island would not violate the restrictions contained within the Town's Code so long as all appropriate authorizations have been obtain through the South Carolina Department of Natural Resources and that such actions are being done in conjunction with or at the direction of the security forces charged with managing these issues within the communities themselves. This is to ensure that all necessary and appropriate

Based on what you have provided below, the Town can affirmatively state that such actions when permitted by the SCDNR and done under the supervision of your organization would not be pursued by the Town as a violation of the existing Code.

Please let me know if you have any additional questions or if you need any additional information.

Thanks,

-Josh-



Joshua A. Gruber  
Assistant Town Manager