



October 5, 2021

Mr. Andrew P. Schumacher
Chief Executive Officer
Palmetto Dunes Property Owners Association
16 Queens Folly Road
Hilton Head Island, SC 29928

RE: 2021 Deer Spotlight Surveys

Dear Mr. Schumacher:

Thank you for the opportunity to conduct spotlight surveys in Palmetto Dunes last month. Spotlight surveys were conducted September 10-12, 2021. The route used for the spotlight surveys was 8.5 miles long and identical to the route used by Folk Land Management (FLM) in prior surveys within the community.

We recorded a total of 35 deer the first night, 32 deer the second night, and 39 the third night. Table 1 provides the mean results of this set of surveys. The table shows how the “acres of visibility” were calculated and used to estimate the density of deer within Palmetto Dunes. Additionally, the ratio of does per buck, fawns per doe, and herd increment are also included.

The September 2021 survey estimates that there are 97 deer per square mile (deer/mi²) or 6.63 acres per deer in Palmetto Dunes.

The fawn/doe ratio of 0.56 seen during this set of surveys is relatively high, but fairly typical for a developed community like Palmetto Dunes. Since most fawn mortality occurs in the first month or two of life, fawns seen in September are likely to survive to adulthood. This high recruitment rate indicates that natural predation is fairly low within the community. For comparison, fall fawn/doe ratios on Seabrook Island (a similar gated community near Charleston, SC) have averaged 0.43 over the last 20 years.

Figure 1 shows the location of all deer seen during the September 2021 surveys. This information is helpful at identifying concentrations of deer within the community and can help determine specific areas on which to concentrate during any future deer harvest efforts.

Data from spotlight surveys can also be used to calculate an approximate number of deer within Palmetto Dunes. This estimate is best used to give managers a “general idea” of the number of deer in the community. I calculated the upland acreage (total acreage minus water features) within Palmetto Dunes to be approximately 1,000 acres, resulting in an estimate of 150 deer.



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I would suggest continuing to do deer surveys annually to monitor changes in density over time. Typically, these surveys are done twice per year (September/October and November/December) for 3 nights during each survey period.

If you have any questions about anything, please do not hesitate to call me. I look forward to working with you in the future.

Sincerely,

Jim Jordan
Wildlife Biologist
Lowcountry Wildlife Specialists, LLC
843-670-1533



Table 1

**Results from deer spotlight surveys conducted in
Palmetto Dunes, South Carolina
September 10-12, 2021**

| | |
|---|--------------|
| 1. Length of line in miles | 8.5 |
| 2. Length of line in yards (# miles x 1,760 yards) | 14960 |
| 3. Number of visibility stations (include .0 station) | 89 |
| 4. Grand total of all visibilities | 6745 |
| 5. Average visibility per station (yards visible/# stations) | 75.79 |
| 6. Square yards in line (length of line in yards x average visibility per station) | 1,133,766.29 |
| 7. Acres of visibility (Square yards in line/4,840 yards in an acre) | 234.25 |

| Bucks | Does | Fawns | Unidentified | Total Observed | Acres of Visibility | Acres per deer | Deer per square mile |
|-------|-------|-------|--------------|----------------|---------------------|----------------|----------------------|
| 2.33 | 17.33 | 9.67 | 6.0 | 35.33 | 234.25 | 6.63 | 97 |

| | |
|---|-------|
| Does Per Buck (does/bucks) | 7.43 |
| Fawns Per Doe (fawns/does) | 0.56 |
| Herd Increment (fawns/bucks + does) | 0.49 |
| Percent Identified (100 - unidentified/total) | 83.02 |

| | |
|-----------------------------|-------------------------|
| Spotters | J. Jordan, D. Henderson |
| Observers (with binoculars) | J. Jordan, D. Henderson |
| Recorder | A. Jordan, C. Jordan |
| Drivers | M. Jordan |

Figure 1. Map of Palmetto Dunes Plantation showing the location of all deer seen during September 10-12, 2021 deer survey (Yellow line shows survey route).

