ALASKA DEPARTMENT OF FISH AND GAME

JUNEAU, ALASKA

STATE OF ALASKA
Bill Sheffield, Governor

DEPARTMENT OF FISH AND GAME
Don W. Collinsworth, Commissioner

DIVISION OF GAME
W. Lewis Pamplin, Jr., Director
Robert A. Hinman, Deputy Director

ANNUAL REPORT OF
SURVEY-INVENTORY ACTIVITIES

PART VI. DEER

Edited and Compiled by
Barbara Townsend, Publications Technician

Volume XVI

Federal Aid in Wildlife Restoration
Project W-22-4, Job 2.0

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(Printed December 1985)
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STATEWIDE HARVEST AND POPULATION STATUS

Sitka black-tailed deer populations were high (Units 4, 6, 8) or low-to-moderate (Units 1, 2, 3). Winter 1984-85 continued the series of favorable winters that has existed for over a decade. Populations are probably at or near carrying capacity in Units 4 and 8.

Hunter harvest of deer was calculated for all areas except Units 6 and 8, and was generally higher than 1983-84. The largest take occurred in Unit 4, with a calculated harvest of 8,911 deer.

Robert A. Hinman
Deputy Director
DEER
SURVEY-INVENTORY PROGRESS REPORT

GAME MANAGEMENT UNIT: 1A and 2

GEOGRAPHICAL DESCRIPTION: Ketchikan area and Prince of Wales Island

PERIOD COVERED: 1 July 1984-30 June 1985

Season and Bag Limit
See Hunting Regulations No. 25.

Population Status and Trend
Population levels in most of Game Management Unit (GMU) 1A appear to be relatively stable. In the northern and western portions of Unit 2, deer populations appear to be increasing and are currently at fairly high levels, with several of the outer islands at high to very high levels. There are still major portions of both units, however, where deer numbers remain low.

Permanent pellet group transects which were established in 1984 were read again during April 1985. Results indicated that within the 4 areas, Heceta Island had the highest deer densities while Revilla Island had the lowest. Deer per square mile estimates at the 75% CL were: Heceta Island, 60 to 127/mi²; Gravina Island, 50 to 91/mi²; Helm Bay, 29 to 73/mi²; and Revilla Island, 17 to 45/mi². Densities in all areas were higher than those recorded in 1984. Over a period of years, these transects should provide population trend information.

Population Composition
No data available.

Mortality
Winter 1984-85 was reasonably mild throughout Unit 1A and Unit 2. There was heavy snow accumulation at higher elevations and fairly deep snow accumulated at low elevations on the mainland in March and April, but most of the deer on the range experienced a good winter. No significant winter mortality was expected and the beach winter mortality transects were not walked. Field observations and other reports indicated virtually no mortality due to winter conditions; the few dead deer
examined showed no signs of starvation or other weather-related mortality.

Harvest information and hunter data for the 1984 hunting season were obtained from a mail survey of 25% of the 11,812 southeastern Alaska licensees who acquired deer harvest tickets. Seventy-three percent of all harvest ticket holders actually hunted. Figures used in this report are estimated totals based on the 25% sample.

Tabulations were made for each Game Management Unit and hunt area. Consequently, an individual who hunted in more than 1 hunt area or more than 1 GMU will be tallied as a hunter in each of those GMU's or areas.

In Subunit 1A, 1,060 hunters spent 5,820 days in the field and killed 620 bucks. Forty-two percent of the active hunters were successful. The average number of days hunted was 5.5, and 9.4 hunter days were expended per deer taken. All calculations indicated slightly better hunting this year than in either 1982 or 1983.

Eighty-three percent of the hunter effort in Subunit 1A occurred on Revilla and Gravina Islands. Hunter success was 41 percent on Gravina Island and 32 percent for the rest of the Subunit.

In Unit 2, 1,910 hunters killed 1,880 deer in 13,070 days of hunting. Sixty-three percent of the hunters were successful and 1.0 deer per hunter was taken. The number of hunters and the number of deer killed were both up from 1983. Hunter success was again much higher in Unit 2 than in Subunit 1A. Most of the Unit 2 harvest was again taken from the north half of Prince of Wales Island; the location of harvest coincides closely with the interconnected logging road system on the island. About 81% of the Unit 2 harvest and hunter effort took place in this area.

The best hunter success in terms of deer per hunter day was on the outer islands west of Craig and Klawock. There were 3.3 hunter days expended for every deer taken in this area, compared with 7.2 hunter days per deer for the road system area. The lowest success was in the southeast part of the island, with 9.5 hunter days per deer.

Management Summary and Recommendations

Deer populations in much of Unit 2 appear to be increasing and some areas are already at a fairly high level. In Subunit 1A, deer numbers are stable to slightly increasing. Range conditions appear good in both Game Management Units, and with the
exception of a few smaller islands, available habitat can support higher deer numbers.

The Unit 2 harvest is currently concentrated in the northern half of Prince of Wales Island along the road system. This localized effort will probably continue and even increase as ferry access improves and knowledge of the area spreads among hunters.

PREPARED BY: Robert E. Wood
Game Biologist III

SUBMITTED BY: Steven R. Peterson
Acting Management Coordinator
DEER
SURVEY-INVENTORY PROGRESS REPORT

GAME MANAGEMENT UNIT: 1B and 3

GEOGRAPHICAL DESCRIPTION: Unit 1B-Southeast mainland from Cape Fanshaw to Lemesurier Point

Unit 3-Islands of the Petersburg, Kake, and Wrangell areas

PERIOD COVERED: 1 July 1984-30 June 1985

Season and Bag Limit
See Hunting Regulations No. 25.

Population Status and Trend

Sitka black-tailed deer are found on most of the islands (Game Management Unit 3) and on the mainland area (Subunit 1B). Populations in these units have periodically reached peaks in the past and then crashed. These declines can be attributed to many factors, the most prominent being severe winters. Carnivore predation, excessive or illegal hunting, and reduced habitat carrying capacity resulting from clearcut logging have also made inroads into the deer population.

Winter surveys were not conducted during the period, although winter 1984-85 was moderately severe. Spring pellet group surveys were conducted on Etolin, Mitkof, and Woronkofski Islands. Each survey plot measured 20 m² and plots were positioned along a predetermined compass course from sea level to snowline.

Woronkofski Island, which was surveyed for the 1st time in 1985, showed 1.44 pellet groups/plot (n = 692), and Mitkof Island showed a count of 1.02 pellet groups/plot (n = 209). Mitkof Island transects for the same sample areas in 1984 showed 0.89 pellet groups/plot, while Etolin Island plots (n = 334) increased to 0.63 pellet groups/plot in 1985 from the 0.36 groups/plot found last year (Table 1). The Etolin surveys again included a transect on Onslow Island.

Deer pellet group surveys are not used to determine actual populations in Unit 3 since many variables influence the data. Persistent snow in winter 1984-85 kept deer at much lower elevations than in 1983-84, which tended to result in higher
pellet group readings. Other potential biases include the following: defecation rates may vary with diet and season; persistence of pellets is not known for the sampled areas; experience and visual acuity of observers vary; visibility of pellets is affected by light conditions, vegetation, and terrain; and pellet groups are not evenly distributed. The technique is most useful for determining gross annual trends in the population and for comparison of deer populations on different islands (M. Thomas, pers. commun.)

As in 1984, deer on Mitkof Island were censused using a spotlight technique. The method employed 2 observers using spotlights from a vehicle driven slowly (<10 mph) along logging roads. Prior to running the transect, visibility (in yards) was recorded at 0.1-mile intervals and the average width was multiplied by the length of the transect to determine the average visible acreage. A population index of deer/mi² was used for comparative purposes, but should not be used to compute total population. Six spotlight transects were run in the Woodpecker Cove region of Mitkof Island (Table 2), an area which has an extensive road system and a growing deer population. Average deer numbers observed varied from 12 deer/mi² seen on Line 3 to 62 deer/mi² on Line 6 (Table 2). When all transects are combined, the data show a mean of 41 deer/mi², a density which is thought to be reasonable for this portion of Mitkof Island.

Population Composition

While some bucks could be identified because of antler development, it was difficult to observe small antlers under a spotlight at night, and consequently no attempt was made to include sex ratio information in survey data. Past experience has shown that the sex of over 50% of the deer cannot be visually determined with certainty during June.

Mortality

A questionnaire designed to determine the legal kill was mailed to a sample of licensed hunters who obtained deer harvest tickets in southeast Alaska during the 1984 hunting season. It was estimated from the survey results that 400 hunters took 130 bucks in Game Management Unit 3, while 70 hunters took 5 bucks in Unit 1B (Table 3). This was an increase of 30 deer over the combined kill in 1983. The predation rate is unknown, although 1 of 2 fawns captured and fitted with radio collars on Mitkof Island in June was killed by a black bear within 2 weeks.

Hunter Survey Area 25, which includes Sokolof, Vank and Woronkofski Islands, was again the most popular hunting location in Game Management Units 1B and 3, and accounted for 95% of the hunters and 96% of the deer harvest.
Established mortality transects were not sampled, and no dead deer were located during the pellet group surveys which provided coverage of 23,870 linear meters on 4 islands. Because habitat conditions were excellent, winter mortality was not a major factor in 1984-85.

Management Summary and Recommendations

Both spotlight counts and pellet group transects indicated an increase in deer numbers on Mitkof Island. Some of this apparent increase can be attributed to a late spring with persistent snows, which forced deer to concentrate at the lower elevations where the sampling was done in 1985. At 2,000 feet or more, snow on shaded slopes persisted into July 1985.

Observed densities of deer on Mitkof Island during spotlight counts varied from 12-62 deer/mi² in 1984. Mitkof pellet group counts showed an increase from 0.78 groups/plot to 0.99 groups/plot. Both spotlight transects and pellet group transects were placed in areas where deer numbers were known to be high (primary zone). In 1986, transects will be needed in locations where deer are not as numerous (secondary zone) to determine whether deer are increasing throughout the island. If deer numbers are sufficiently high in the secondary zone, a recommendation will be made to conduct a limited season in 1987. The regional biometrician will be consulted to formulate a criterion of "sufficiently high," by utilizing the pellet group census data from locations in southeast Alaska where hunting now occurs.

PREPARED BY: E. L. Young
Game Biologist III

SUBMITTED BY: Steven R. Peterson
Acting Management Coordinator
Table 1. 1985 Game Management Unit 3 deer pellet group survey results.

<table>
<thead>
<tr>
<th>Location</th>
<th>Transect No.</th>
<th>No. plots</th>
<th>No. groups</th>
<th>Groups/plot</th>
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<td>Etolin Island</td>
<td>01</td>
<td>113</td>
<td>76</td>
<td>0.67</td>
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<tr>
<td></td>
<td>02</td>
<td>116</td>
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</tr>
<tr>
<td></td>
<td>03</td>
<td>105</td>
<td>39</td>
<td>0.37</td>
</tr>
<tr>
<td><strong>Total/mean</strong></td>
<td></td>
<td>334</td>
<td>195</td>
<td>0.58</td>
</tr>
<tr>
<td>Mitkof Island</td>
<td>01</td>
<td>73</td>
<td>83</td>
<td>1.14</td>
</tr>
<tr>
<td></td>
<td>02</td>
<td>74</td>
<td>72</td>
<td>0.97</td>
</tr>
<tr>
<td></td>
<td>03</td>
<td>62</td>
<td>52</td>
<td>0.84</td>
</tr>
<tr>
<td><strong>Total/mean</strong></td>
<td></td>
<td>209</td>
<td>207</td>
<td>0.99</td>
</tr>
<tr>
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<td>97</td>
<td>1.70</td>
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<td></td>
<td>02</td>
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<td>83</td>
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<td><strong>Total/mean</strong></td>
<td></td>
<td>646</td>
<td>1,034</td>
<td>1.60</td>
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*Data not available.*
Table 2. Mitkof Island, Alaska, deer spotlight census data for 1985.

<table>
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<tr>
<th>Night</th>
<th>Line No.</th>
<th>Length (miles)</th>
<th>Visible acres</th>
<th>Bucks</th>
<th>Does</th>
<th>Fawns</th>
<th>Unk</th>
<th>Total Deer</th>
<th>Total mi²</th>
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<td>June 3</td>
<td>2</td>
<td>2.7</td>
<td>321</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
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</tr>
<tr>
<td></td>
<td>3</td>
<td>2.7</td>
<td>118</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>16</td>
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<td>5</td>
<td>2.7</td>
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<td>43</td>
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<tr>
<td></td>
<td>6</td>
<td>4.0</td>
<td>121</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>14</td>
<td>21</td>
<td>111</td>
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<td>321</td>
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<td>1</td>
<td>0</td>
<td>6</td>
<td>7</td>
<td>14</td>
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<tr>
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<td>110</td>
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<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>23</td>
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<td>2.7</td>
<td>206</td>
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<td>2</td>
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<td>59</td>
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<td></td>
<td>6</td>
<td>4.0</td>
<td>121</td>
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<td>June 5</td>
<td>1</td>
<td>2.0</td>
<td>122</td>
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<td>0</td>
<td>5</td>
<td>5</td>
<td>26</td>
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<td>2.0</td>
<td>321</td>
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<td>10</td>
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<td></td>
<td>3</td>
<td>2.7</td>
<td>118</td>
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<td>2</td>
<td>2</td>
<td>11</td>
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<td></td>
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<td>2.7</td>
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<td>0</td>
<td>10</td>
<td>15</td>
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<td>58</td>
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<td>June 6</td>
<td>1</td>
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<td>122</td>
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<td>79</td>
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<tr>
<td>Totals</td>
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<td>37.8</td>
<td>2,213</td>
<td>0</td>
<td>20</td>
<td>3</td>
<td>118</td>
<td>141</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>2.1</td>
<td>123</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>41</td>
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</tbody>
</table>

*a Based on length x the average distance at which deer were observed.*
Table 3. Deer harvest in Game Management Units 1B and 3, 1984.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Total hunters</th>
<th>Successful hunters</th>
<th>Percent successful</th>
<th>Total hunter days</th>
<th>Total deer killed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1B</td>
<td>70</td>
<td>5</td>
<td>7</td>
<td>440</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>400</td>
<td>130</td>
<td>33</td>
<td>1,440</td>
<td>130</td>
</tr>
<tr>
<td>Total</td>
<td>470</td>
<td>135</td>
<td>29</td>
<td>1,880</td>
<td>135</td>
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</table>
DEER
SURVEY-INVENTORY PROGRESS REPORT

GAME MANAGEMENT UNIT: 1C

GEOGRAPHICAL DESCRIPTION: Mainland from Cape Fanshaw to the
latitude of Eldred Rock

PERIOD COVERED: 1 July 1984-30 June 1985

Season and Bag Limit

See Hunting Regulations No. 25.

Population Status and Trend

Pellet group transects were established on Shelter Island and
Lincoln Island in 1984, and on Douglas Island in 1985. Tran­
sects read in 1984 showed that the number of deer per square
mile of winter habitat was estimated at 59-111 animals at a 75% confidence level. The high dispersion value k for the area of
1.802 may indicate that deer densities were evenly distributed
throughout the area. The mild winter of 1983-84 probably
contributed largely to this condition.

For this same area in 1985, the lower value of k (1.236),
suggested that deer were more clumped on their winter range.
In this case, deeper snow conditions could have kept deer in
smaller areas for longer periods. The density of deer in 1985
averaged 100/mi² (74-136 @ 75% CL). These data suggest a
higher density than what was indicated for 1984 (k = 81; 59-111
@ 75% CL).

On Douglas Island, pellet group transects were established and
read in May 1985 for the 1st time. The k value was 1.091
(75% CL) and the density of deer/mi² was 49-105 with a mean of
72 deer.

Overall, deer numbers seem to have increased over last year.

Population Composition

No data were collected.

Mortality

Twenty-five percent of the total number of deer hunters, selected from all deer harvest ticket-holders in southeastern
Alaska in 1984, were mailed a questionnaire to assess harvest and hunter pressure. Expanded estimates based on a portion of the questionnaire responses indicated that 950 hunters spent 3,610 days hunting deer in 1984 in Subunit 1C and took 395 deer (265 males and 130 females), averaging 0.11 deer per hunter day or 0.42 deer per hunter. The success rate for taking at least 1 deer was 41% (N = 390 hunters).

The only natural mortality recorded was a male deer on Shelter Island in May 1985. Its age was estimated at between 3 and 4 years old. Since the antlers were still attached to the skull, death probably occurred in December or earlier.

Management Summary and Recommendations

Harvest information which was obtained in 1983 from the deer hunter questionnaire mail survey, and reported in the Subunit 1C Survey-Inventory Progress Report for 1983-84, has been revised (Table 1).

Although more than twice as many hunters took to the field in 1984 as in 1983, and were more successful (41% compared with 20% in 1983), the harvests of the 2 years were nearly identical (Table 1). According to the survey, successful hunters averaged only about 1 deer each in 1984, whereas successful hunters averaged slightly over 2.25 deer the previous year.

Winter losses were considered low despite snow accumulations during the latter part of the winter. Deer numbers increased over 1983, according to pellet group transect results. Only 1 deer mortality was noted during observation of 11 miles of pellet group transects.

No season or bag limit changes are recommended.

The loss of deer habitat in Subunit 1C, due to urbanization and logging, will reduce populations in those areas affected.

PREPARED BY:  SUBMITTED BY:

David W. Zimmerman  Steven R. Peterson
Game Biologist II  Acting Management Coordinator
Table 1. Deer harvest data for Subunit 1C, Southeastern Alaska, obtained from Deer Hunter Questionnaire Mail Survey information, 1980-84.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total hunters</th>
<th>Successful hunters</th>
<th>% Success</th>
<th>Hunter days total</th>
<th>Bucks killed</th>
<th>Does killed</th>
<th>Total deer killed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>760</td>
<td>160</td>
<td>21</td>
<td>2,770</td>
<td>175</td>
<td>70</td>
<td>245</td>
</tr>
<tr>
<td>1982</td>
<td>1,030</td>
<td>200</td>
<td>19</td>
<td>3,980</td>
<td>160</td>
<td>130</td>
<td>290</td>
</tr>
<tr>
<td>1983</td>
<td>860</td>
<td>170</td>
<td>20</td>
<td>3,110</td>
<td>220</td>
<td>170</td>
<td>390</td>
</tr>
<tr>
<td>1984</td>
<td>950</td>
<td>390</td>
<td>41</td>
<td>3,610</td>
<td>265</td>
<td>130</td>
<td>395</td>
</tr>
</tbody>
</table>
DEER
SURVEY-INVENTORY PROGRESS REPORT

GAME MANAGEMENT UNIT: 4

GEOGRAPHICAL DESCRIPTION: Admiralty, Baranof, Chichagof, and adjacent Islands

PERIOD COVERED: 1 July 1984-30 June 1985

Season and Bag Limit
See Hunting Regulations No. 25.

Population Status and Trend
No data available.

Mortality - Natural

Winter of 1984-85 was more severe than the mild winters that have prevailed during recent years. However, the snow did not become excessively deep until late winter so winter losses were minimal. Eight of the 23 permanent winter mortality transects were examined during late spring 1985. No winter mortalities were found in those areas so no additional permanent transects were examined. In addition, approximately 45 miles of deer winter habitat were examined in conjunction with other activities—primarily pellet group counts. These observations yielded a total of 9 instances of suspected winter mortalities. On those transects, 2 dead deer that appeared to have been recent bear kills were found. They were young animals with good deposits of bone marrow fat, so their deaths could not be attributed to winter starvation. To summarize, although spring of 1985 was very late and snow accumulations were heavy, winter mortality apparently was slight.

Mortality - Sport Harvest

The sport harvest estimate for 1984 was based on a harvest questionnaire that was sent to a random sample of deer harvest ticket holders. The procedure for this questionnaire was described in the 1982 report. The 1984 harvest estimate was based on a sampling of 15% of all harvest ticket holders. The mechanics of the procedure, and all calculations, were done by Rodney Flynn and Michael Thomas of the Region I office.

Results of the 1984 survey (see Tables 1 and 2) show that persons pursuing deer in Unit 4 had excellent success, taking a
near-record harvest of about 8,900 deer, which was about 75% of the regionwide total harvest. The 1984 data showed an increase in the number of deer per hunter, a reduction in days of hunting effort expended per deer taken, and a high percentage of bucks taken. All of these factors indicate a high deer population, especially since the harvest was taken without the aid of snow. These figures are all slightly higher than those for 1983.

Parasitological Observations

Casual observations of parasite infections have been recorded intermittently and were last reported in the 1980-81 Unit 4 Survey and Inventory report. During February 1985, 15 fawns (approximately 9 months old) were collected under Project W-22-4, Job No. 2.8. All 15 fawns harbored heavy infections of lungworm (Dictyocaulus viviparus). Subsequent conversations with scientists familiar with this parasite suggest that the prevalence and intensity of such an infection should be of concern.

West Admiralty Special January Season

This hunt was regulated by a registration permit system as was described in the 1983 report. Each person wishing to participate was required to obtain a permit in person at the temporary Alaska Department of Fish and Game field office in Angoon. Permits were good for 1 deer of either sex; upon reporting a deer kill (within 5 days) a 2nd permit could be obtained. Permits were nontransferable, and a valid 1985 hunting license was required where appropriate. The Subsistence Division, providing the only departmental presence in Angoon, issued and collected permits. These efforts were greatly appreciated. Sixty-two persons obtained permits; 58 from Angoon, 1 from Juneau, and 3 from elsewhere in Alaska. These persons reported taking 11 deer.

Population Composition

No data are available.

Management Summary and Recommendations

Mild wintering conditions of recent years have been favorable for over-winter survival. It is assumed that the Unit 4 deer populations, on areas of unaltered habitat, are at or above maximum desired levels. Regulations adopted by the Alaska Board of Game for the 1984 season should allow maximum opportunity to use this resource. The significance of the apparent high incidence of lungworm in fawns-of-the-year should be investigated.
Winter mortality and accelerated timber harvests, which are concentrated in the critical high-volume stands of old-growth timber, continue to be the only serious impacts on deer numbers in Unit 4. The former is temporary—the latter, permanent.

Literature Cited


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Game Biologist III

SUBMITTED BY:
Steven R. Peterson
Acting Management Coordinator

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Table 1. Game Management Unit 4 deer harvests, by community, 1984.

<table>
<thead>
<tr>
<th>Community</th>
<th>Total number harvest tickets issued</th>
<th>Total Unit 4 hunters</th>
<th>Estimated harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sitka</td>
<td>2,193</td>
<td>1,665</td>
<td>3,242</td>
</tr>
<tr>
<td>Juneau/Douglas</td>
<td>3,667</td>
<td>2,017</td>
<td>3,124</td>
</tr>
<tr>
<td>Petersburg</td>
<td>752</td>
<td>343</td>
<td>638</td>
</tr>
<tr>
<td>Ketchikan + IA &amp; 2 residents</td>
<td>3,280</td>
<td>116</td>
<td>242</td>
</tr>
<tr>
<td>Wrangell</td>
<td>658</td>
<td>88</td>
<td>182</td>
</tr>
<tr>
<td>Hoonah</td>
<td>303</td>
<td>245</td>
<td>561</td>
</tr>
<tr>
<td>Angoon</td>
<td>130</td>
<td>94</td>
<td>180</td>
</tr>
<tr>
<td>Pelican</td>
<td>98</td>
<td>64</td>
<td>149</td>
</tr>
<tr>
<td>Kake</td>
<td>75</td>
<td>32</td>
<td>76</td>
</tr>
<tr>
<td>Port Alexander</td>
<td>19</td>
<td>14</td>
<td>34</td>
</tr>
<tr>
<td>Tenakee Springs</td>
<td>45</td>
<td>37</td>
<td>60</td>
</tr>
<tr>
<td>Gustavus</td>
<td>47</td>
<td>33</td>
<td>53</td>
</tr>
<tr>
<td>Haines/Skagway</td>
<td>160</td>
<td>57</td>
<td>118</td>
</tr>
<tr>
<td>Elfin Cove</td>
<td>21</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>Funter Bay</td>
<td>10</td>
<td>29</td>
<td>71</td>
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<tr>
<td>Other</td>
<td>355</td>
<td>115</td>
<td>190</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11,812</strong></td>
<td><strong>4,970</strong></td>
<td><strong>8,920</strong></td>
</tr>
</tbody>
</table>
Table 2. Game Management Unit 4 deer harvest data, 1984.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total(^a)</th>
<th>% Males</th>
<th>Days effort</th>
<th>Deer per hunter</th>
<th>Winter mortality per mile of transect</th>
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</thead>
<tbody>
<tr>
<td>1984</td>
<td>8,900</td>
<td>73</td>
<td>3.2</td>
<td>1.8</td>
<td>0.00(^b)</td>
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<tr>
<td>1983</td>
<td>8,400</td>
<td>74</td>
<td>3.7</td>
<td>1.7</td>
<td>0.00(^c)</td>
</tr>
<tr>
<td>1982</td>
<td>5,630(^g)</td>
<td>72</td>
<td>4.7</td>
<td>1.3</td>
<td>1.25</td>
</tr>
<tr>
<td>1981</td>
<td>5,700(^a)</td>
<td>77</td>
<td>3.8</td>
<td>1.5</td>
<td>0.00(^d)</td>
</tr>
<tr>
<td>1980</td>
<td>4,500</td>
<td>75</td>
<td>6.7</td>
<td>1.4</td>
<td>0.00</td>
</tr>
<tr>
<td>1979</td>
<td>950</td>
<td>70</td>
<td>4.5</td>
<td>1.0</td>
<td>0.00</td>
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<tr>
<td>1978</td>
<td>2,024</td>
<td>70</td>
<td>2.5</td>
<td>1.1</td>
<td>0.72</td>
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<tr>
<td>1977</td>
<td>2,945(^f)</td>
<td>N/A</td>
<td>1.6</td>
<td>1.2</td>
<td>0.00</td>
</tr>
<tr>
<td>1976</td>
<td>1,475(^e)</td>
<td>67</td>
<td>7.5</td>
<td>0.7</td>
<td>0.00</td>
</tr>
<tr>
<td>1975</td>
<td>4,247(^f)</td>
<td>57</td>
<td>2.2(^g)</td>
<td>2.1(^g)</td>
<td>0.96</td>
</tr>
<tr>
<td>1974</td>
<td>7,118</td>
<td>57</td>
<td>3.1</td>
<td>2.3</td>
<td>0.41</td>
</tr>
<tr>
<td>1973</td>
<td>7,000</td>
<td>67</td>
<td>3.5</td>
<td>2.5</td>
<td>0.78</td>
</tr>
<tr>
<td>1972</td>
<td>2,500</td>
<td>54</td>
<td>4.9</td>
<td>1.4</td>
<td>0.64</td>
</tr>
<tr>
<td>1971</td>
<td>3,040</td>
<td>N/A</td>
<td>3.3</td>
<td>1.7</td>
<td>1.11</td>
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<tr>
<td>1970</td>
<td>4,040</td>
<td>56</td>
<td>N/A</td>
<td>2.1</td>
<td>1.61</td>
</tr>
<tr>
<td>1969</td>
<td>1,756</td>
<td>45</td>
<td>8.0</td>
<td>0.8</td>
<td>0.00</td>
</tr>
</tbody>
</table>


\(^b\) Eight transects examined.

\(^c\) Thirteen transects examined.

\(^d\) Seven transects examined.

\(^e\) Range 4,190-7,227.

\(^f\) Hunter interview data calculated harvest of 14,700.

\(^g\) Data for Sitka hunters only below this year.
DEER
SURVEY-INVENTORY PROGRESS REPORT

GAME MANAGEMENT UNIT: 6

GEOGRAPHICAL DESCRIPTION: Prince William Sound

PERIOD COVERED: 1 July 1984-30 June 1985

Season and Bag Limit

See Hunting Regulations No. 25.

Population Status and Trend

The Prince William Sound deer population is currently at a high level. A series of mild winters has allowed this deer herd to gradually increase from the low levels of the early 1970's.

Population Composition

Age data were determined from a sample of 53 deer jaws obtained from Cordova hunters. The sample included 3 (5%) fawns, 20 (38%) yearlings, 1 (2%) 2-year-old, 10 (19%) 3-year-olds, 8 (15%) 4-year-olds, and 11 (21%) 5-year-olds.

Mortality

A deer hunter questionnaire was mailed to a sample of 6,000 hunters who obtained deer harvest tickets during the 1984 season. An analysis of information contained on these questionnaires has not been completed.

Management Summary and Recommendations

Results of the 1984 deer harvest cannot be compared with previous harvests until data from the 1984 questionnaire have been analyzed. My initial impression of the 1984 harvest is that it will exceed last year's harvest and that hunting pressure has greatly increased.

Hunting conditions during the season generally favored the deer. Snow depths never forced the deer to remain near beach fringes. Snow depth during the winter of 1984-85 was minimal until late winter (March and April). Prince William Sound deer were stressed during these months; however, I believe most animals survived.
DEER
SURVEY-INVENTORY PROGRESS REPORT

GAME MANAGEMENT UNIT: 8

GEOGRAPHICAL DESCRIPTION: Kodiak and adjacent Islands

PERIOD COVERED: 1 July 1984-30 June 1985

Season and Bag Limit

See Hunting Regulations No. 25.

Population Status and Trend

The deer population on western and southern Kodiak Island was stable. Natural mortality on northern Kodiak Island and on Afognak Island during the winter resulted in a moderate population decline.

Population Composition

No data were collected during this reporting period.

Mortality

Results of a deer hunter questionnaire, mailed to a sample of hunters who obtained deer harvest tickets, will not be available until the next reporting period. A preliminary review of information contained on these questionnaires, and personal interviews with hunters, have indicated that the 1984 harvest was comparable to the estimated 6,225 deer killed the previous year. Interviews with hunters during the season indicated that deer numbers were high in Unit 8 except on northern Kodiak Island and Afognak Island.

Initial reports from residents of Afognak and the northeastern Kodiak Islands indicate that moderate winter losses occurred through mid-April 1985. Heavy snowfall occurred in March and April and relatively cold temperatures persisted into late April; these conditions have produced heavy losses of deer in previous winters. Light-to-moderate mortality occurred during the previous (1983-84) winter in the northern Kodiak and Afognak Island areas.

Management Summary and Recommendations

Although hunters generally reported that deer numbers were lower on Afognak Island, hunter success did not appear to be
seriously reduced. High deer abundance and hunter success were reported from most of the southern and western Kodiak Island areas.

No changes in season or bag limits are recommended.

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