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Virginia bald eagle nest and productivity survey: Year 2005 report

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VIRGINIA BALD EAGLE

NEST AND PRODUCTIVITY SURVEY: YEAR 2005 REPORT



**CENTER FOR CONSERVATION BIOLOGY
COLLEGE OF WILLIAM AND MARY**

VIRGINIA BALD EAGLE NEST AND PRODUCTIVITY SURVEY: YEAR 2005 REPORT

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Front Cover: *Eagle Chick in nest along the James River. Photo by Catherine Markham.*



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EXECUTIVE SUMMARY

By the late 1960's, the Virginia bald eagle breeding population had been decimated by eggshell thinning and associated low productivity. In 1977, the U. S. Fish and Wildlife Service formed the Chesapeake Bay Bald Eagle Recovery Team. This team was tasked with developing a plan for the recovery of the Bay population. As part of this process, state wildlife agencies assumed the responsibility for population monitoring. The Virginia Department of Game & Inland Fisheries along with the College of William & Mary initiated a systematic survey in the spring of 1977. Since that time, the annual bald eagle survey has become the most essential element of a successful conservation strategy. Our objectives in continuing the Virginia bald eagle nest survey are 1) to monitor the recovery of the bald eagle in Virginia, 2) to document the status, distribution, and productivity of breeding bald eagles in Virginia, 3) to provide information to the government agencies charged with the management and protection of the Virginia Bald Eagle population, 4) to provide information to land holders about the status of Bald Eagles on their properties, and 5) to increase our understanding of Bald Eagle natural history in Virginia.

The Virginia Bald Eagle survey measures breeding activity and productivity via a standard 2-flight approach. The first flight is conducted between late February and mid-March to locate active nests. A high-wing Cessna 172 aircraft is used to systematically overfly the land surface at an altitude of approximately 100 m to detect eagle nests. All Bald Eagle nests detected are plotted on 7.5 min topographic maps and given a unique alpha-numeric code. Each nest is examined to determine its condition and activity status. The second survey flight is conducted from late April through mid-May to check active nests for productivity.

During the 2005 breeding season, the annual survey documented 453 occupied Bald Eagle territories in Virginia. This number represents a 5.8% increase over 2004. This growth rate is considerably lower than the 10-12% increases observed in recent years. However, documented breeding attempts increased in nearly all geographic areas. The majority of known territories continue to be concentrated within the coastal plain with less than 4% of pairs occurring in the piedmont and mountains. Occupied territories were located within 36 counties and 9 independent cities. A total of 657 chicks were counted during the productivity flight. This is the highest chick production recorded during the 29-year survey. Average reproductive rate (1.58 chicks/breeding attempt) was the second highest in the history of the survey. Success rate (84%) and average brood size (1.88 chicks/productive nest) were forth and third highest in the survey history respectively. These values continue the upward trend in reproductive performance observed over the past 15 years.

BACKGROUND

Context

No specific estimates of the Chesapeake Bay Bald Eagle population are available prior to the early 1900's. However, given the high productivity of Bay waters and the availability of extensive shallow-water foraging areas, it has been speculated that prior to European settlement the Chesapeake Bay may have supported one of the densest breeding populations of Bald Eagles outside of Alaska. By applying breeding densities from Alaska to the 13,000 km of Chesapeake shoreline, Fraser et al. (1991) suggest that the pristine Chesapeake may have supported in excess of 3,000 breeding pairs of Bald Eagles. A more recent investigation (Watts et al. 2003) shows significant spatial variation in colonization rates and breeding density that suggests carrying capacity varies throughout the Bay. One implication of these results is that the initial carrying capacity of the Bay may have been approximately half of that projected by the Fraser et al. (1991) study.

A decline in the Chesapeake Bay Bald Eagle population was evident to the ornithological community by the mid-1950's. The first aerial survey of eagle nests in the Chesapeake Bay was conducted in 1962 (Abbott 1963). The survey included approximately twice the land area covered by Tyrell in 1936. Survey results suggested that about 150 breeding pairs of eagles remained in the Chesapeake Bay in 1962. Annual aerial surveys continued to document a decline until the population reached an estimated low of 80-90 pairs in 1970 (Abbott 1978).

In 1977, the U. S. Fish and Wildlife Service formed the Chesapeake Bay Bald Eagle Recovery Team (Abbott 1977). This team was tasked with developing a plan for the recovery of the Bay population. As part of this process, state wildlife agencies assumed the responsibility for population monitoring. As the state agency responsible for wildlife management, The Virginia Game Commission (currently, The Virginia Department of Game & Inland Fisheries) is responsible for Bald Eagle monitoring and management in Virginia. Under contract to the state M. A. Byrd took over responsibility for the survey in 1977. The 2005 breeding season represents the 29th year of the comprehensive Bald Eagle breeding survey.

Objectives

Our objectives in continuing the Virginia bald eagle nest survey are:

- 1) to monitor the recovery of the bald eagle in Virginia
- 2) to document the status, distribution, and productivity of breeding bald eagles in Virginia
- 3) to provide information to the government agencies charged with the management and protection of the Virginia bald eagle population
- 4) to provide information to land holders about the status of bald eagles on their properties
- 5) to increase our understanding of bald eagle natural history in Virginia

METHODS

Study Area

The primary focus area for the Virginia Bald Eagle breeding survey includes the tidal reaches of Chesapeake Bay tributaries and the lower Delmarva Peninsula. All Chesapeake Bay tributaries in Virginia are systematically surveyed to the extent of tidal influence. These drainages encompass nearly all historic records of breeding eagles in Virginia and continue to support the vast majority of the population. Throughout the 1990's, several areas have been added to the core survey area including Back Bay/North Landing River area, Lake Drummond, Kerr Reservoir, Lake Chesdin, Swift Creek Reservoir, Diascund Reservoir, and Lake Manassas. No attempts have been made to systematically survey the piedmont and mountain regions of Virginia. With the dramatic increase in inland reservoirs over the past few decades, it seems likely that breeding pairs remain undiscovered within these physiographic provinces. Nesting pairs known to occur within these regions have generally been discovered by agency biologists and the general public.

Survey

The Virginia Bald Eagle survey measures breeding activity and productivity via a standard 2-flight approach (Fraser et al. 1983). The first flight is conducted between late February and mid-March to locate active nests. A high-wing Cessna 172 aircraft is used to systematically overfly the land surface at an altitude of approximately 100 m to detect eagle nests. The aircraft is maneuvered systematically between the shoreline and a distance of approximately 1 km to cover the most probable breeding locations. All Bald Eagle nests detected are plotted on 7.5 min topographic maps and given a unique alpha-numeric code. Each nest is examined to determine its condition and activity status. A breeding territory is considered to be "occupied" if a pair of birds is observed in association with the nest and there is evidence of recent nest maintenance (e.g. well-formed cup, fresh lining, structural maintenance). Nests are considered to be "active" if a bird is observed in an incubating posture or if eggs or young are detected in the nest (Postupalsky 1974). The second survey flight is conducted from late April through mid-May to check active nests for productivity. A high-wing Cessna 172 is flown low over the nest allowing observers to examine nest contents. The number of eaglets present is recorded along with their approximate ages.



Survey plane over Hog Island Wildlife Management Area. Photo by Bryan Watts.



Typical nesting situation in cluster of pines on Lake Chesdin. Photo by Bryan Watts.



Typical nesting situation in isolated pine over marsh (Rappahannock River). Photo by Bryan Watts.



Single 5-wk old chick in nest. Photo by Catherine Markham.

RESULTS

Breeding Population

A total of 453 Bald Eagle territories was determined to be occupied in Virginia during the 2005 breeding season (Table 1, see Appendices I – VIII for nesting details by geographic area). When compared to 2004, this represents a 5.8% increase in the breeding population (Table 2). This rate is generally lower than what has been documented throughout most of the 29-year history of the survey (Figure 1). More than 90 new nests were mapped in 2005. Many of these new nests represent relocations within existing territories, although a substantial number of new territories were discovered. The number of active nests increased by 7.0% compared to the previous year. Growth in the Virginia breeding population appears to be slowing in recent years, possibly reflecting some threshold in capacity within the lower Chesapeake Bay.

Table 1. Summary of 2005 Bald Eagle survey results by geographic area. See methods for definitions of “occupied territory” and “active nest”. Chicks/active nests and chicks/productive nests are mean values.

GEOGRAPHIC AREA	OCCUP TERRS	ACTIVE NESTS	CHICKS PROD	CHICKS/ACT NEST¹	CHICKS/PROD NEST¹
POTOMAC RIVER	95	92	131	1.49	1.72
RAPPAHAN. RIVER	120	113	153	1.44	1.65
YORK RIVER	53	49	85	1.77	1.93
JAMES RIVER	103	99	171	1.99	1.99
WESTERN SHORE	20	18	28	1.75	1.75
EASTERN SHORE	31	30	44	1.91	1.91
LOWER TIDEWATER	13	12	19	1.90	1.90
INLAND AREAS	18	16	26	1.86	1.86
TOTAL	453	429	657	1.58	1.81

¹Calculated based on nests with known outcome. Success of 12 nests known to be active was not determined.

Growth between 2004 and 2005 was variable between geographic areas (Tables 1 and 2) with much of the gains along the Rappahannock and York Rivers. A modest gain was recorded along the James River with the Potomac River, Western Shore, Eastern Shore, lower tidewater and inland areas stable to declining. As in 2004, documented breeding attempts increased in nearly all geographic areas. The majority of known territories continue to be concentrated within the coastal plain with less than 4% of pairs occurring in the piedmont and mountains (it should be noted that the systematic survey is focused primarily on the coastal tributaries). Occupied territories were located within 36 counties and 9 independent cities (Table 3). Westmoreland, King George, Richmond, Essex, and Charles City counties continue to support the highest number of pairs in the state. These 5 counties alone account for 37.1% of the state population.

Table 2. Summary of 2004 Bald Eagle survey results by geographic area. See methods for definitions of “occupied territory” and “active nest”. Chicks/active nests and chicks/productive nests are mean values.

GEOGRAPHIC AREA	OCCUP TERRS	ACTIVE NESTS	CHICKS PROD	CHICKS/ACT NEST¹	CHICKS/PROD NEST¹
POTOMAC RIVER	96	91	112	1.32	1.81
RAPPAHAN. RIVER	109	100	150	1.60	1.90
YORK RIVER	42	41	70	1.71	1.89
JAMES RIVER	98	91	155	1.70	2.01
WESTERN SHORE	21	19	34	1.79	2.00
EASTERN SHORE	32	31	45	1.45	1.73
LOWER TIDEWATER	12	11	20	1.82	2.00
INLAND AREAS	18	17	26	1.63	1.86
TOTAL	428	401	612	1.58	1.90

¹Calculated based on nests with known outcome. Success of 13 nests known to be active was not determined.

VIRGINIA BALD EAGLE POPULATION ANNUAL INCREASE

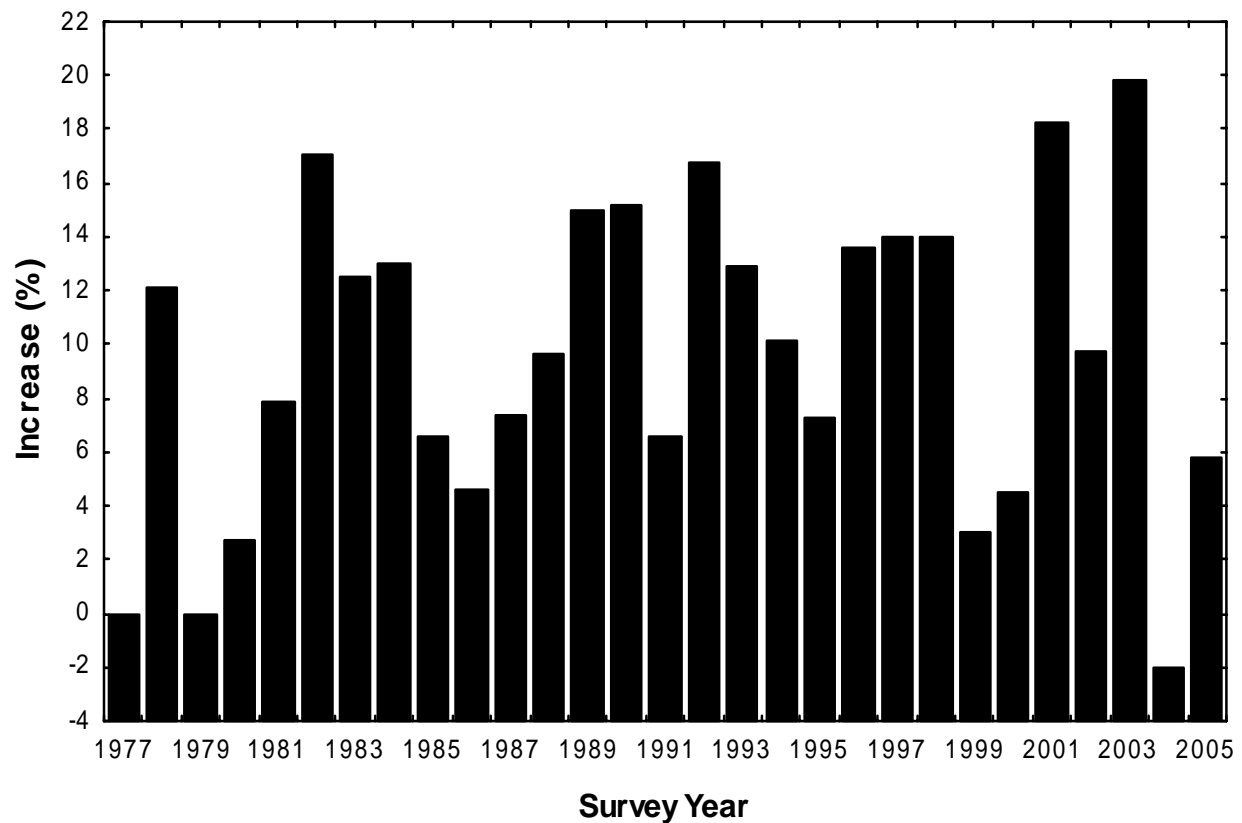


Figure 1. Annual increase values for the 29-year survey period (1977-2005). Values calculated as $(\text{Pairs}_t - \text{Pairs}_{t-1}) / \text{Pairs}_{t-1} \times 100$.

VIRGINIA BALD EAGLE BREEDING POPULATION

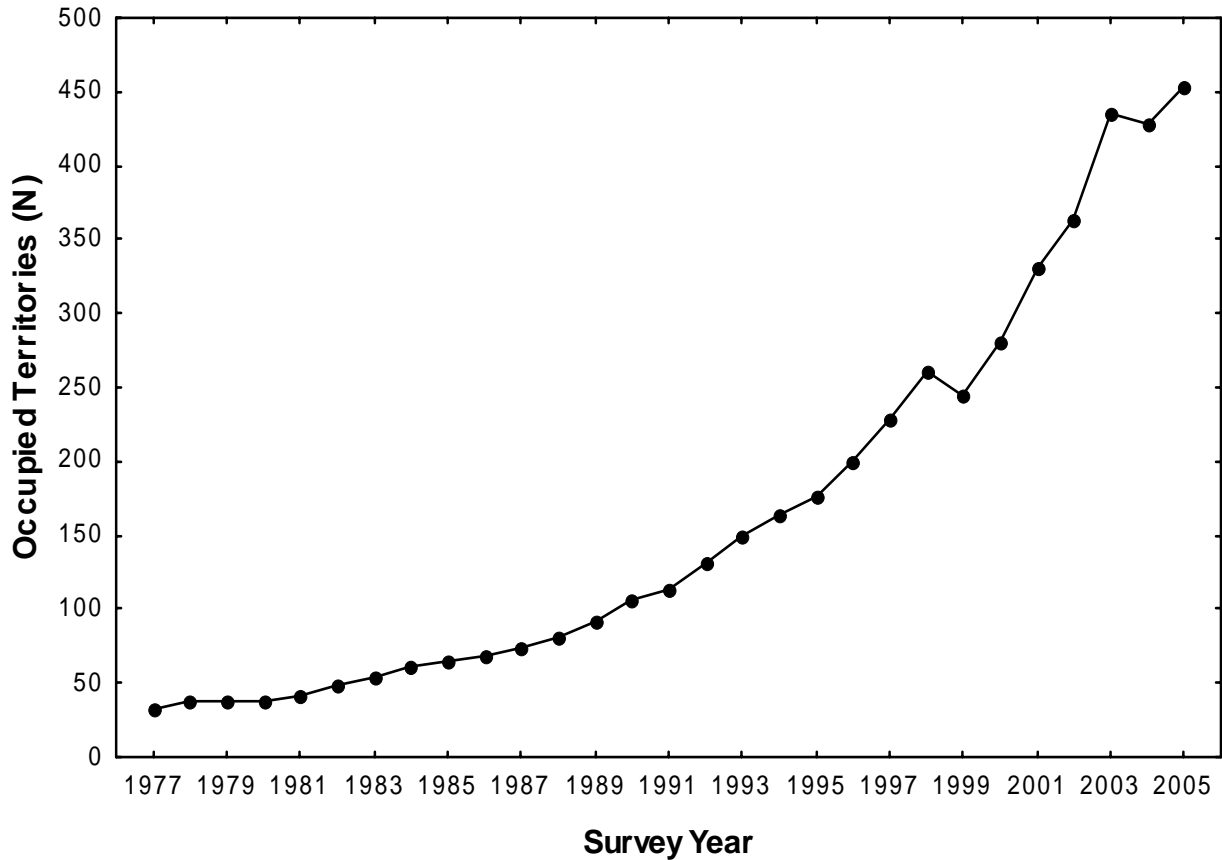


Table 3. Summary of 2005 Bald Eagle survey results by jurisdiction. See methods for definitions of “occupied territory” and “active nest”. Chicks/active nests and chicks/productive nests are mean values.

COUNTY	OCCUP TERRS	ACTIVE NESTS	CHICKS PROD	CHICKS/ACT NESTS	CHICKS/PROD NESTS
Counties					
Accomack	19	18	25	1.39	1.67
Albemarle	?	?	-----	-----	-----
Amherst	2	2	3	1.50	1.50
Bath	?	?	-----	-----	-----
Caroline	15	15 ¹	14	1.56	2.00
Charles City	27	27	36	1.33	1.89
Chesterfield	9	8	16	2.00	2.29
Clarke	?	?	-----	-----	-----
Culpepper	?	?	-----	-----	-----
Essex	30	28	38	1.36	1.73
Fairfax	8	7 ²	11	2.20	2.20
Fauquier	?	?	-----	-----	-----
Gloucester	6	5	8	1.60	2.00
Halifax	2	2	4	2.00	2.00
Hanover	1	1	2	2.00	2.00
Henrico	5	5	8	1.60	1.60

Table 3. –continued–

COUNTY	OCCUP TERRS	ACTIVE NESTS	CHICKS PROD	CHICKS/ ACT NESTS	CHICKS/ PROD NESTS
Counties					
Isle of Wight	6	5	12	2.40	2.40
James City	18	18	26	1.44	1.73
King George	37	37	50	1.35	1.56
King & Queen	8	8	11	1.38	1.57
King William	15	14	21	1.50	1.91
Lancaster	12	9	16	1.78	2.00
Louisa	1	1	1	1.00	1.00
Mathews	5	5	8	1.60	1.60
Mecklenburg	7	7	13	1.86	1.86
Middlesex	15	13(11)	26	2.00	2.36
New Kent	14	13 ²	27	2.25	2.25
Northampton	12	12	19	1.58	2.11
Northumberland	17	16	22	1.38	1.57
Nottoway	2	1	1	1.00	1.00
Page	?	?	-----	-----	-----
Pittsylvania	?	?	-----	-----	-----
Powhatan	1	1	2	2.00	2.00
Prince Edward	1	1	3	3.00	3.00
Prince George	14	13	29	2.23	2.23
Prince William	6	6	9	1.50	2.25
Richmond	31	30 ²	37	1.28	1.68
Shenandoah	?	?	-----	-----	-----
Southampton	1	1	2	2.00	2.00
Stafford	14	12 ³	15	1.50	1.89
Surry	18	17	30	1.76	2.00
Sussex	1	1	0	0	0
Westmoreland	42	41	62	1.51	1.77
York	8	7	13	1.86	2.17
Independent Cities					
Chesapeake City	3	3	4	1.33	2.00
Hampton City	2	1	3	3.00	3.00
Hopewell City	1	0	0	0	0
Newport News City	3	3	7	2.33	2.33
Norfolk City	1	1	2	2.00	2.00
Petersburg City	1	1	1	1.00	1.00
Richmond City	1	1	2	2.00	2.00
Suffolk City	4	4	7	1.75	1.75
Virginia Beach City	8	7	13	1.86	2.17

¹Results of 6 active nests unknown.²Results of 1 active nest unknown.

Productivity

A total of 657 chicks were counted during the productivity flight (Table 1, see Appendices I – VIII for nesting details by geographic area). This is the highest chick production recorded during the 29-year survey. The Virginia population continues to have tremendous reproductive momentum. Of 6,063 chicks documented in the past 29 years, 10.8% were produced in 2005 and more than 51% were produced since 2000 (Figure 3). In general, this momentum is the combined result of an overall increase in the breeding population, the breeding success rate and the average brood size. Average reproductive rate (1.58 chicks/breeding attempt) was the second highest in the history of the survey. Success rate and average brood size were both high in 2005. The percentage of active nests that were documented to be successful was 84% (Figure 4). This is the fourth highest success rate over the 29 years. Average brood size (chicks/productive nests) was 1.88 chicks/nest (Figure 5). This rate is the third highest over the history of the survey. These values continue the upward trend in reproductive performance observed over the past 15 years.

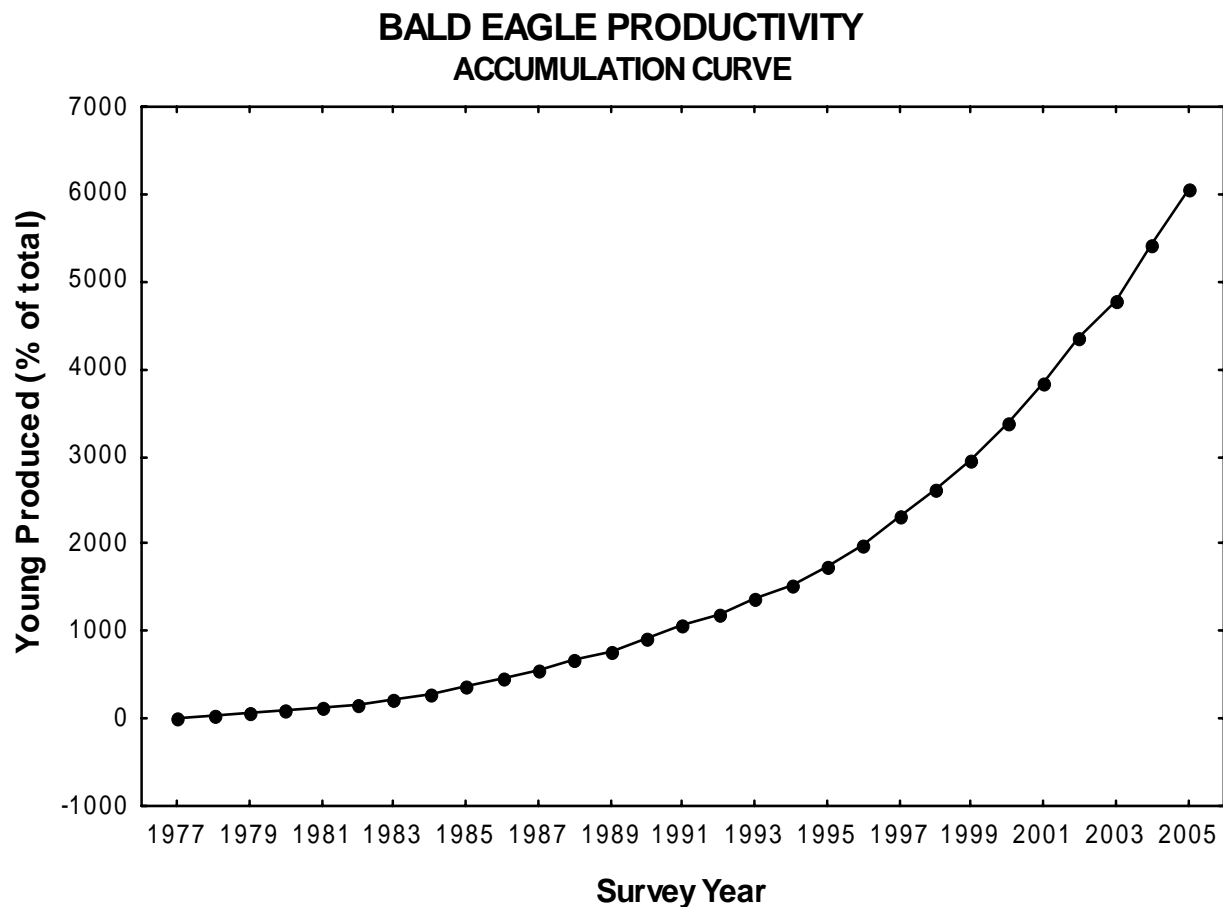


Figure 3. Productivity accumulation curve for Bald Eagles in Virginia (1977-2005). Total chicks produced over the 29-year study was 6,063.

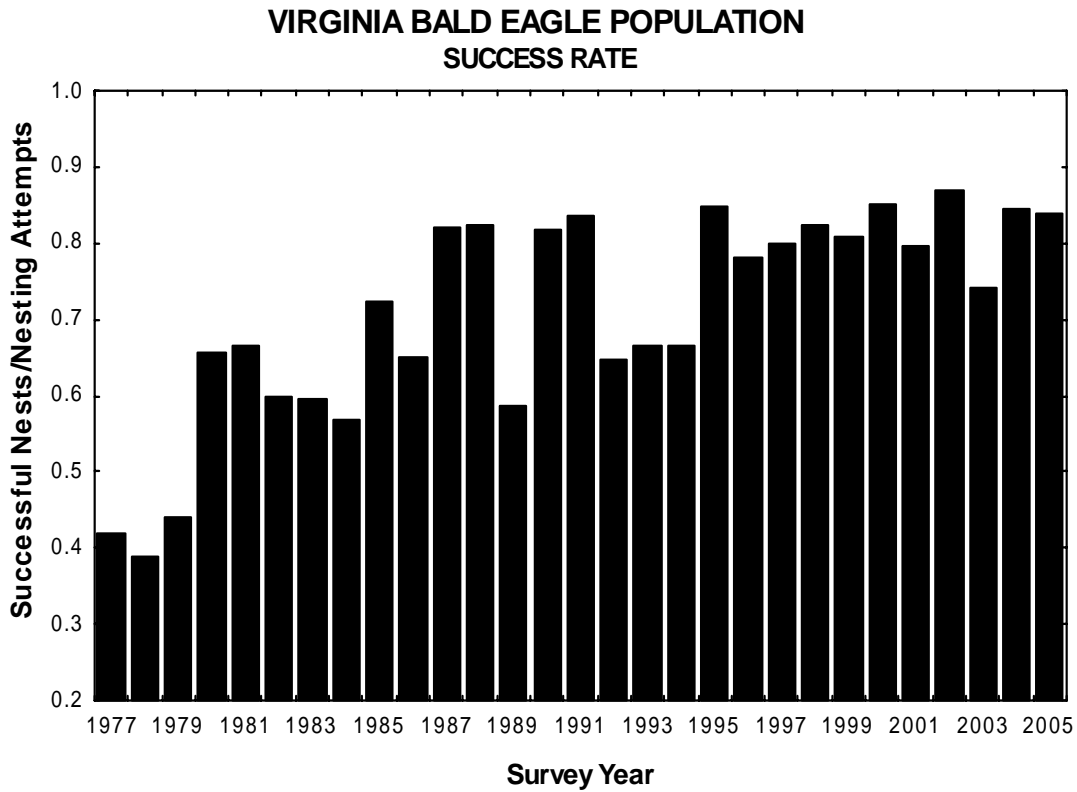


Figure 4. General trend in success rate for Bald Eagles in Virginia (1977-2005). Success rate calculated as successful nests/active nests.

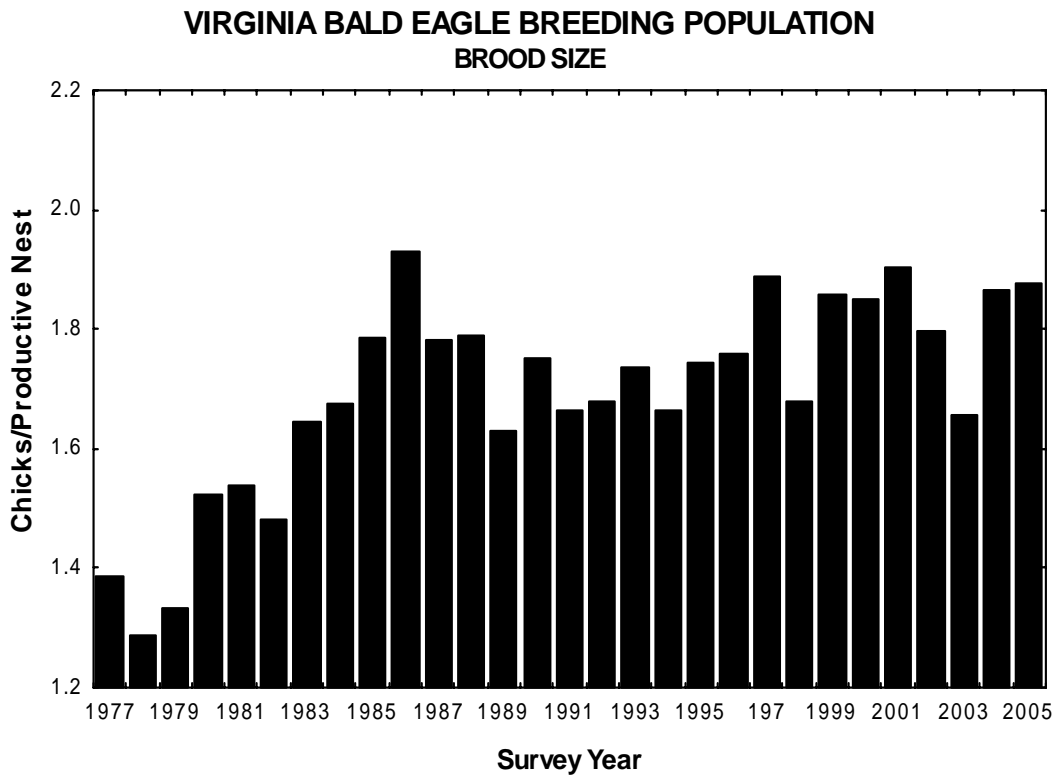


Figure 5. Temporal trend in average brood size for Bald Eagles in Virginia (1977-2005).

DISCUSSION

Growth in the Virginia Bald Eagle breeding population was higher in 2005 compared to 2004 but was still considerably lower than the average rate documented over the past 15 years. Known breeding pairs increased by 5.8% compared to a pace of 10-12% observed in recent years. It is possible that the eagle population is beginning to approach capacity within the lower Chesapeake Bay. Breeding densities vary considerably over the survey area with tidal fresh reaches of the major tributaries supporting 3-4 times the breeding density of areas surrounding more saline waters (Watts et al. In press). Despite high breeding densities within lower saline waters, much of the growth in the breeding population continues to be along these same waters.

Reports of adult eagles within inland regions of Virginia are increasing year after year. These areas are outside the traditional survey area. Currently, known inland territories represent less than 4% of the state population. This is certainly an underestimate of the population in these physiographic regions. A systematic survey of large inland water bodies is needed to assess status, distribution, and colonization patterns for these locations in the state.

The Virginia Bald Eagle population produced the largest number of chicks ever recorded in the state. A total of 657 chicks were produced surpassing the 612 chicks produced in 2004 and the 501 chicks produced in 2002. Per capita reproductive rate was the second highest in the history of the survey. Success rate and average brood size were also high in 2005. Success rate and average brood size were the fourth and third highest in the survey history respectively. These values continue the upward trend in reproductive performance observed over the past 15 years. At present there is no indication that reproductive performance is being influenced by breeding density.

As has been the case in previous years, the annual breeding survey has played an important role in the recovery of the Virginia Bald Eagle population. In addition to tracking the progress of the population, the survey has been used to guide management actions. Without information on the distribution and activity status of breeding pairs, layers of protection provided by federal laws would not be effective. The program has proven to be one of the most important elements of a successful conservation strategy (Byrd et al. 1990).

ACKNOWLEDGMENTS

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Appendix I: Summary of 2005 Bald Eagle survey results for the Potomac River Drainage. See methods section for definition of “occupied territory” and “active nest”.

¹Nesting results unknown due to dense foliage during productivity flight.

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chick Productivity
FF-04-01	Fairfax	Fort Belvoir	Y	Y	2
FF-04-03	Fairfax	Indian Head	Y	Y	0
FF-05-01	Fairfax	Fort Belvoir	Y	Y	2
FF-05-02	Fairfax	Occoquan	Y	Y	2
FF-92-01	Fairfax	Mount Vernon	NC	NC	NC
FF-94-01	Fairfax	Fort Belvoir	Y	Y	0
FF-96-01	Fairfax	Fort Belvoir	Y	Y	3
FF-96-02	Fairfax	Fort Belvoir	Y	Y	? ¹
FF-97-01	Fairfax	Fort Belvoir	Y	Y	2
KG-00-01	King George	Dahlgren	Y	Y	2
KG-00-02	King George	Dahlgren	Y	Y	1
KG-01-03	King George	King George	Y	Y	0
KG-01-04	King George	Dahlgren	Y	Y	2
KG-02-05	King George	Mathias Point	Y	Y	2
KG-04-02	King George	Passapatanzy	Y	Y	0
KG-04-04	King George	King George	Y	Y	1
KG-04-05	King George	Dahlgren	Y	Y	3
KG-04-07	King George	Dahlgren	Y	Y	3
KG-05-07	King George	King George	Y	Y	2
KG-05-08	King George	King George	Y	Y	1
KG-05-09	King George	Dahlgren	Y	Y	1
KG-05-11	King George	Dahlgren	Y	Y	1
KG-82-02	King George	Rollins Fork	Y	Y	2
KG-83-02	King George	Dahlgren	Y	Y	2
KG-87-03	King George	King George	Y	Y	1
KG-87-04	King George	Dahlgren	Y	Y	0
KG-87-05	King George	Mathias Point	Y	Y	2
KG-90-02	King George	King George	Y	Y	0
KG-97-01	King George	Passapatanzy	Y	Y	2
KG-97-05	King George	Dahlgren	Y	Y	1
KG-98-08	King George	Mathias Pt	Y	Y	1
KG-99-05	King George	Dahlgren	Y	Y	1
KG-99-07	King George	Mathias Pt	Y	Y	1
ND-02-02	N. Umberland	Lottsburg	Y	Y	2
ND-02-03	N. Umberland	Heathsville	Y	Y	2
ND-03-02	N. Umberland	Kinsale	Y	Y	2
ND-04-03	N. Umberland	Burgess	Y	Y	1
ND-04-04	N. Umberland	Burgess	Y	Y	0

Appendix I: -continued-

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chick Productivity
ND-04-05	N. Umberland	Heathsville	Y	Y	2
ND-04-06	N. Umberland	St. George Isl	Y	Y	2
ND-05-01	N. Umberland	Lottsburg	Y	Y	0
ND-86-01	N. Umberland	Lancaster	Y	Y	1
ND-96-01	N. Umberland	Kinsale	Y	N	-----
PW-02-01	Prince William	Quantico	Y	Y	0
PW-03-01	Prince William	Quantico	Y	Y	2
PW-03-02	Prince William	Quantico	Y	Y	2
PW-05-01	Prince William	Fort Belvoir	Y	Y	0
PW-99-01	Prince William	Quantico	Y	Y	3
PW-99-02	Prince William	Quantico	Y	Y	2
ST-00-01	Stafford	Widewater	Y	Y	1
ST-00-02	Stafford	Joplin	Y	?	? ¹
ST-01-02	Stafford	Widewater	Y	Y	0
ST-01-03	Stafford	Widewater	Y	Y	2
ST-02-01	Stafford	Widewater	Y	Y	0
ST-04-01	Stafford	Stafford	Y	Y	? ¹
ST-04-02	Stafford	Widewater	Y	Y	2
ST-05-01	Stafford	Widewater	Y	Y	2
ST-05-02	Stafford	Widewater	Y	Y	2
ST-05-03	Stafford	Passapatanzy	Y	Y	3
ST-05-04	Stafford	Passapatanzy	Y	N	-----
ST-96-03	Stafford	Passapatanzy	Y	Y	1
ST-99-01	Stafford	Widewater	Y	Y	? ¹
WE-00-07	Westmoreland	Kinsale	Y	Y	1
WE-00-08	Westmoreland	Kinsale	Y	Y	2
WE-01-10	Westmoreland	Piney Point	Y	Y	2
WE-01-11	Westmoreland	Rollins Fork	Y	Y	2
WE-01-12	Westmoreland	Machodac	Y	Y	1
WE-02-03	Westmoreland	Stratford Hall	Y	Y	2
WE-02-05	Westmoreland	St. Clements Isl	Y	Y	2
WE-02-07	Westmoreland	Kinsale	Y	Y	1
WE-03-03	Westmoreland	Col, Beach N.	Y	Y	3
WE-03-07	Westmoreland	Col. Beach S.	Y	Y	2
WE-03-10	Westmoreland	Stratford Hall	Y	Y	2
WE-03-11	Westmoreland	Machodac	Y	Y	2
WE-03-12	Westmoreland	St. Clements Isl	Y	Y	2
WE-03-15	Westmoreland	St. Clements Isl	Y	Y	2
WE-04-04	Westmoreland	Kinsale	Y	Y	2
WE-04-07	Westmoreland	St. Clements Isl	Y	Y	2

Appendix I: -continued-

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chick Productivity
WE-05-02	Westmoreland	Col. Beach N.	Y	Y	0
WE-05-03	Westmoreland	Col. Beach S.	Y	N	3
WE-05-04	Westmoreland	Col. Beach S.	Y	Y	2
WE-05-05	Westmoreland	Stratford Hall	Y	Y	0
WE-05-06	Westmoreland	Montross	Y	Y	0
WE-05-07	Westmoreland	Machodac	Y	Y	2
WE-05-08	Westmoreland	Machodac	Y	Y	0
WE-05-09	Westmoreland	St. Clements Isl	Y	Y	2
WE-05-10	Westmoreland	Rollins Fork	Y	Y	2
WE-90-01	Westmoreland	Col. Beach S.	Y	N	-----
WE-90-03	Westmoreland	Col. Beach S.	Y	Y	3
WE-91-02	Westmoreland	Stratford Hall	Y	Y	0
WE-94-02	Westmoreland	Col. Beach S.	Y	Y	2
WE-95-03	Westmoreland	Rollins Fork	Y	Y	2
WE-96-03	Westmoreland	St. Clements Isl	Y	Y	2
WE-97-11	Westmoreland	St. Clements Isl	Y	Y	2
WE-98-03	Westmoreland	Col. Beach S.	Y	Y	1
WE-98-05	Westmoreland	Machodac	Y	Y	3
WE-98-07	Westmoreland	Kinsale	Y	Y	1

Appendix II: Summary of 2005 Bald Eagle survey results for the Rappahannock River Drainage. See methods section for definition of “occupied territory” and “active nest”.

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
CA-00-02	Caroline	Rapp Academy	Y	Y	0
CA-01-01	Caroline	Rapp Academy	Y	Y	2
CA-02-01	Caroline	Port Royal	Y	Y	? ¹
CA-04-01	Caroline	Supply	Y	Y	? ¹
CA-04-02	Caroline	Supply	Y	Y	2
CA-04-03	Caroline	Bowling Green	Y	Y	? ¹
CA-04-04	Caroline	Port Royal	Y	Y	? ¹
CA-05-01	Caroline	Rapp Academy	Y	Y	2
CA-05-02	Caroline	Bowling Green	Y	Y	? ¹
CA-90-02	Caroline	Port Royal	Y	Y	3
CA-90-03	Caroline	Rapp Academy	Y	Y	2
CA-95-01	Caroline	Port Royal	Y	Y	0
CA-95-02	Caroline	Rapp Academy	Y	Y	2
CA-96-03	Caroline	Supply	Y	Y	? ¹
ES-00-04	Essex	Champlain	Y	Y	1
ES-01-03	Essex	Mount Landing	Y	Y	2
ES-01-05	Essex	Champlain	Y	Y	2
ES-01-06	Essex	Champlain	Y	Y	1
ES-02-02	Essex	Mount Landing	Y	Y	3
ES-02-05	Essex	Loretto	Y	Y	2
ES-03-02	Essex	Tappahannock	Y	Y	2
ES-03-03	Essex	Dunnsville	Y	Y	0
ES-03-04	Essex	Champlain	Y	N	-----
ES-03-06	Essex	Rollins Fork	Y	N	-----
ES-04-01	Essex	Dunnsville	Y	Y	0
ES-04-02	Essex	Dunnsville	Y	Y	1
ES-04-05	Essex	Mount Landing	Y	Y	2
ES-04-06	Essex	Champlain	Y	Y	1
ES-04-09	Essex	Champlain	Y	Y	2
ES-04-10	Essex	Loretto	Y	Y	0
ES-04-11	Essex	Loretto	Y	Y	1
ES-04-12	Essex	Loretto	Y	Y	3
ES-05-01	Essex	Dunnsville	Y	Y	3
ES-05-02	Essex	Tappahannock	Y	Y	2
ES-05-04	Essex	Mount Landing	Y	Y	0
ES-05-05	Essex	Champlain	Y	Y	1
ES-05-06	Essex	Champlain	Y	Y	2
ES-05-07	Essex	Champlain	Y	Y	1

Appendix II: -continued-

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
ES-05-08	Essex	Champlain	Y	Y	2
ES-05-09	Essex	Rollins Fork	Y	Y	0
ES-05-10	Essex	Rollins Fork	Y	Y	1
ES-05-10	Essex	Champlain	Y	Y	1
ES-79-01	Essex	Morattico	Y	Y	2
ES-95-05	Essex	Tappahannock	Y	Y	0
KG-02-01	King George	Port Royal	Y	Y	1
KG-02-03	King George	Rollins Fork	Y	Y	1
KG-03-01	King George	Passapatanzy	Y	Y	1
KG-03-03	King George	Rollins Fork	Y	Y	1
KG-03-04	King George	Rollins Fork	Y	Y	2
KG-05-01	King George	Port Royal	Y	Y	0
KG-05-02	King George	Port Royal	Y	Y	2
KG-05-03	King George	Port Royal	Y	Y	1
KG-05-04	King George	Port Royal	Y	Y	2
KG-05-05	King George	Port Royal	Y	Y	2
KG-05-06	King George	Rollins Fork	Y	Y	2
KG-95-03	King George	Rollins Fork	Y	Y	1
KG-97-08	King George	Rollins Fork	Y	Y	2
LA-01-02	Lancaster	Irvington	Y	Y	1
LA-02-03	Lancaster	Urbanna	Y	Y	3
LA-03-03	Lancaster	Irvington	Y	Y	2
LA-03-05	Lancaster	Lively	Y	Y	2
LA-04-01	Lancaster	Lively	Y	Y	2
LA-04-02	Lancaster	Lively	Y	N	-----
LA-04-04	Lancaster	Irvington	Y	Y	0
LA-04-05	Lancaster	Irvington	Y	Y	2
LA-04-06	Lancaster	Irvington	Y	Y	1
LA-04-07	Lancaster	Urbanna	Y	Y	3
LA-05-01	Lancaster	Lancaster	Y	N	-----
MI-01-03	Middlesex	Morattico	Y	Y	3
MI-02-03	Middlesex	Church View	Y	Y	2
MI-02-04	Middlesex	Church View	Y	Y	2
MI-02-05	Middlesex	Church View	Y	Y	3
MI-02-07	Middlesex	Saluda	Y	Y	2
MI-03-01	Middlesex	Wilton	Y	Y	1
MI-03-03	Middlesex	Urbanna	Y	N	-----
MI-03-04	Middlesex	Urbanna	Y	Y	2
MI-05-01	Middlesex	Urbanna	Y	N	-----
MI-05-02	Middlesex	Urbanna	Y	Y	3

Appendix II: -continued-

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
MI-05-03	Middlesex	Church View	Y	Y	0
MI-96-01	Middlesex	Urbanna	Y	Y	3
RI-00-01	Richmond	Champlain	Y	Y	0
RI-02-02	Richmond	Montross	Y	Y	3
RI-02-08	Richmond	Tappahannock	Y	Y	1
RI-02-09	Richmond	Tappahannock	Y	Y	1
RI-03-01	Richmond	Champlain	Y	Y	0
RI-03-03	Richmond	Tappahannock	Y	N	-----
RI-03-05	Richmond	Tappahannock	Y	Y	0
RI-03-10	Richmond	Haynesville	Y	Y	1
RI-03-11	Richmond	Haynesville	Y	Y	2
RI-03-12	Richmond	Morattico	Y	Y	1
RI-03-13	Richmond	Morattico	Y	Y	3
RI-04-03	Richmond	Morattico	Y	Y	2
RI-04-04	Richmond	Morattico	Y	Y	1
RI-05-01	Richmond	Champlain	Y	Y	0
RI-05-02	Richmond	Mount Landing	Y	Y	2
RI-05-03	Richmond	Montross	Y	Y	2
RI-05-04	Richmond	Tappahannock	Y	Y	0
RI-05-05	Richmond	Tappahannock	Y	Y	0
RI-05-06	Richmond	Tappahannock	Y	Y	2
RI-05-07	Richmond	Tappahannock	Y	Y	1
RI-05-09	Richmond	Morattico	Y	Y	1
RI-05-10	Richmond	Morattico	Y	Y	3
RI-81-02	Richmond	Champlain	Y	Y	1
RI-87-03	Richmond	Tappahannock	Y	Y	2
RI-89-02	Richmond	Tappahannock	Y	Y	2
RI-90-03	Richmond	Champlain	Y	Y	? ²
RI-90-04	Richmond	Tappahannock	Y	Y	0
RI-96-03	Richmond	Morattico	Y	Y	2
RI-97-01	Richmond	Montross	Y	Y	2
RI-98-01	Richmond	Champlain	Y	Y	2
RI-98-03	Richmond	Montross	Y	Y	0
ST-01-01	Stafford	Salem Church	Y	Y	2
WE-01-01	Westmoreland	Rollins Fork	Y	Y	3
WE-01-02	Westmoreland	Loretto	Y	Y	1
WE-02-01	Westmoreland	Champlain	Y	Y	1
WE-03-16	Westmoreland	Haynesville	Y	Y	1

Appendix II: -continued-

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
WE-04-01	Westmoreland	Rollins Fork	Y	Y	0
WE-04-02	Westmoreland	Rollins Fork	Y	Y	1
WE-05-01	Westmoreland	Champlain	Y	Y	0
WE-88-01	Westmoreland	Champlain	Y	Y	1

¹No access to airspace to check productivity.

²Nesting results unknown due to dense foliage during productivity flight.

Appendix III: Summary of 2005 Bald Eagle survey results for the York River Drainage. See methods section for definition of “occupied territory” and “active nest”.

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
CA-99-01	Caroline	Ashland	Y	Y	1
GL-01-02	Gloucester	Clay Bank	Y	N	-----
GL-02-02	Gloucester	Gressitt	Y	Y	2
GL-04-01	Gloucester	Gressitt	Y	Y	2
GL-04-02	Gloucester	Clay Bank	Y	Y	3
GL-05-01	Gloucester	Clay Bank	Y	Y	0
GL-05-02	Gloucester	Gressitt	Y	Y	1
HN-05-01	Hanover	Hanover	Y	Y	2
JC-00-01	James City	Gressitt	Y	Y	3
JC-05-02	James City	Williamsburg	Y	Y	1
JC-95-01	James City	Toano	Y	Y	2
KQ-03-02	King & Queen	K&Q Courthouse	Y	Y	1
KQ-04-01	King & Queen	West Point	Y	Y	1
KQ-04-02	King & Queen	West Point	Y	Y	2
KQ-05-01	King & Queen	King William	Y	Y	2
KQ-05-02	King & Queen	K&Q Courthouse	Y	Y	2
KQ-96-01	King & Queen	K&Q Courthouse	Y	Y	1
KW-00-01	King William	K&Q Courthouse	Y	Y	0
KW-01-02	King William	Tunstall	Y	Y	3
KW-02-01	King William	K&Q Courthouse	Y	Y	2
KW-03-01	King William	Tunstall	Y	Y	1
KW-03-02	King William	West Point	Y	Y	1
KW-03-03	King William	New Kent	Y	Y	2
KW-04-01	King William	New Kent	Y	Y	3
KW-05-01	King William	Tunstall	Y	Y	2
KW-05-02	King William	West Point	Y	Y	2
KW-05-03	King William	King William	Y	Y	0
KW-05-04	King William	King William	Y	Y	2
KW-80-01	King William	West Point	Y	Y	1
KW-88-01	King William	New Kent	Y	N	-----
KW-98-02	King William	K&Q Courthouse	Y	Y	2
KW-99-01	King William	K&Q Courthouse	Y	Y	0
NK-01-01	New Kent	West Point	Y	Y	2
NK-01-03	New Kent	Tunstall	Y	Y	3
NK-02-01	New Kent	New Kent	Y	Y	2
NK-03-01	New Kent	Toano	Y	Y	3
NK-03-02	New Kent	Toano	Y	Y	2
NK-03-04	New Kent	New Kent	Y	Y	3

Appendix III: -continued-

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
NK-04-01	New Kent	West Point	Y	Y	2
NK-04-03	New Kent	Tunstall	Y	Y	3
NK-05-01	New Kent	Tunstall	Y	Y	? ¹
NK-86-01	New Kent	Tunstall	Y	Y	2
NK-91-01	New Kent	New Kent	Y	N	-----
NK-98-04	New Kent	New Kent	Y	Y	2
NK-99-01	New Kent	Toano	Y	Y	1
YK-02-02	York	Yorktown	Y	Y	0
YK-02-04	York	Williamsburg	Y	Y	3
YK-02-06	York	Williamsburg	Y	Y	2
YK-03-01	York	Clay Bank	Y	Y	2
YK-04-01	York	Poquoson W.	Y	Y	2
YK-04-02	York	Yorktown	Y	Y	2
YK-04-03	York	Williamsburg	Y	Y	2
YK-99-02	York	Williamsburg	Y	N	-----

¹Could not locate nest during productivity flight.

Appendix IV: Summary of 2005 Bald Eagle survey results for the James River Drainage. See methods section for definition of “occupied territory” and “active nest”.

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
CC-00-02	Charles City	Walkers	Y	Y	3
CC-01-05	Charles City	Walkers	Y	Y	2
CC-01-06	Charles City	Westover	Y	Y	0
CC-02-02	Charles City	Westover	Y	Y	1
CC-02-04	Charles City	Brandon	Y	Y	2
CC-02-06	Charles City	Brandon	Y	Y	2
CC-02-07	Charles City	Westover	Y	Y	2
CC-03-01	Charles City	Westover	Y	Y	2
CC-03-02	Charles City	Hopewell	Y	Y	2
CC-03-03	Charles City	Westover	Y	Y	2
CC-03-05	Charles City	Charles City	Y	Y	0
CC-04-01	Charles City	Westover	Y	Y	0
CC-04-02	Charles City	Westover	Y	Y	0
CC-04-03	Charles City	Charles City	Y	Y	0
CC-04-04	Charles City	Brandon	Y	Y	0
CC-04-05	Charles City	Claremont	Y	Y	1
CC-04-06	Charles City	Brandon	Y	Y	1
CC-05-01	Charles City	Westover	Y	Y	3
CC-05-02	Charles City	Charles City	Y	Y	3
CC-05-03	Charles City	Brandon	Y	Y	1
CC-05-04	Charles City	Walkers	Y	Y	2
CC-05-05	Charles City	Hopewell	Y	Y	1
CC-05-06	Charles City	Charles City	Y	Y	2
CC-91-02	Charles City	Charles City	Y	Y	2
CC-96-02	Charles City	Brandon	Y	Y	0
CC-98-05	Charles City	Brandon	Y	Y	0
CC-99-04	Charles City	Charles City	Y	Y	2
CD-02-02	Chesterfield	Hopewell	Y	Y	2
CD-04-02	Chesterfield	Dutch Gap	Y	Y	1
CD-04-03	Chesterfield	Dutch Gap	Y	Y	3
CD-98-01	Chesterfield	Hopewell	Y	Y	2
CD-98-02	Chesterfield	Hopewell	Y	Y	3
CD-99-01	Chesterfield	Hopewell	Y	Y	3
HE-03-01	Henrico	Hopewell	Y	Y	2
HE-04-01	Henrico	Dutch Gap	Y	Y	1
HE-05-01	Henrico	Dutch Gap	Y	Y	1
HE-99-01	Henrico	Hopewell	Y	Y	3
HE-99-02	Henrico	Drewrys Bluff	Y	Y	1

Appendix IV: -continued-

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
HO-04-01	Hopewell City	Hopewell	Y	N	-----
IW-02-01	Isle of Wight	Bacons Castle	Y	N	-----
IW-04-01	Isle of Wight	Benns Church	Y	Y	2
IW-04-02	Isle of Wight	Mulberry Island	Y	Y	2
IW-05-01	Isle of Wight	Mulberry Island	Y	Y	2
IW-86-01	Isle of Wight	Bacons Castle	Y	Y	3
IW-96-01	Isle of Wight	Benns Church	Y	Y	3
JC-01-01	James City	Surry	Y	Y	0
JC-01-02	James City	Hog Island	Y	Y	1
JC-01-05	James City	Surry	Y	Y	0
JC-02-01	James City	Norge	Y	Y	2
JC-03-01	James City	Norge	Y	Y	0
JC-03-03	James City	Norge	Y	Y	3
JC-03-04	James City	Hog Island	Y	Y	2
JC-04-01	James City	Hog Island	Y	Y	2
JC-04-03	James City	Norge	Y	Y	1
JC-04-04	James City	Norge	Y	Y	1
JC-04-05	James City	Norge	Y	Y	1
JC-04-06	James City	Norge	Y	Y	2
JC-04-08	James City	Surry	Y	Y	1
JC-05-01	James City	Hog Island	Y	Y	1
JC-05-03	James City	Yorktown	Y	Y	1
JC-96-02	James City	Norge	Y	Y	2
NK-01-04	New Kent	Walkers	Y	Y	2
NN-02-01	Newport News	Mulberry Island	Y	Y	2
NN-02-02	Newport News	Newpt News N.	Y	Y	3
NN-04-01	Newport News	Mulberry Island	Y	Y	2
PB-04-01	Petersburg	Prince George	Y	Y	1
PG-00-02	Prince George	Savedge	Y	Y	2
PG-00-03	Prince George	Charles City	Y	Y	2
PG-00-04	Prince George	Westover	Y	N	-----
PG-00-05	Prince George	Westover	Y	Y	1
PG-01-01	Prince George	Savedge	Y	Y	2
PG-01-02	Prince George	Savedge	Y	Y	3
PG-01-03	Prince George	Charles City	Y	Y	3
PG-04-02	Chesterfield	Hopewell	Y	Y	2
PG-04-03	Prince George	Brandon	Y	Y	3
PG-05-01	Prince George	Claremont	Y	Y	2
PG-05-02	Prince George	Westover	Y	Y	2
PG-05-03	Prince George	Hopewell	Y	Y	3

Appendix IV: -continued-

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
PG-89-01	Prince George	Charles City	Y	Y	1
PG-91-01	Prince George	Charles City	Y	Y	2
PG-94-02	Prince George	Westover	Y	Y	3
PO-98-01	Powhatan	Midlothian	Y	Y	2
RM-01-01	Richmond City	Bonair	Y	Y	2
SK-03-01	Suffolk City	Windsor	Y	Y	3
SK-04-01	Suffolk City	Newpt News S.	Y	Y	2
SK-91-01	Suffolk City	Chuckatuck	Y	Y	1
SU-03-02	Surry	Hog Island	Y	Y	3
SU-03-03	Surry	Claremont	Y	Y	2
SU-03-04	Surry	Claremont	Y	Y	1
SU-04-01	Surry	Hog Island	Y	Y	2
SU-04-02	Surry	Hog Island	Y	Y	1
SU-04-03	Surry	Hog Island	Y	Y	2
SU-04-04	Surry	Surry	Y	Y	2
SU-04-05	Surry	Surry	Y	Y	2
SU-04-06	Surry	Surry	Y	Y	2
SU-04-07	Surry	Claremont	Y	Y	0
SU-04-08	Surry	Claremont	Y	Y	2
SU-04-09	Surry	Savedge	Y	Y	2
SU-05-01	Surry	Hog Island	Y	Y	2
SU-05-02	Surry	Surry	Y	Y	0
SU-05-03	Isle of Wight	Hog Island	Y	Y	3
SU-05-04	Surry	Surry	Y	Y	2
SU-96-04	Surry	Hog Island	Y	N	-----
SU-97-04	Surry	Surry	Y	Y	2

Appendix V: Summary of 2005 Bald Eagle survey results for the western shore fringe of the Chesapeake Bay. See methods section for definition of “occupied territory” and “active nest”.

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
HM-03-01	Hampton City	Newport News N.	Y	N	-----
HM-04-01	Hampton City	Hampton	Y	Y	3
KQ-02-02	King & Queen	Church View	Y	Y	2
KQ-04-03	King & Queen	Church View	Y	Y	0
LA-03-04	Lancaster	Deltaville	Y	N	-----
MA-00-01	Mathews	Mathews	Y	Y	2
MA-01-01	Mathews	Ware Neck	Y	Y	1
MA-01-02	Mathews	Mathews	Y	Y	2
MA-02-01	Mathews	New Point Comfrt	Y	Y	1
MA-97-01	Mathews	Ware Neck	Y	Y	2
MI-02-06	Middlesex	Shacklefords	Y	Y	2
MI-04-01	Middlesex	Wilton	Y	Y	3
MI-85-01	Middlesex	Wilton	Y	Y	0
ND-01-01	N. Umberland	Fleets Bay	Y	Y	1
ND-02-05	N. Umberland	Reedville	Y	Y	2
ND-03-03	N. Umberland	Reedville	Y	Y	1
ND-04-01	N. Umberland	Reedville	Y	Y	2
ND-04-02	N. Umberland	Reedville	Y	Y	1
ND-05-02	N. Umberland	Reedville	Y	Y	2
ND-92-01	N. Umberland	Reedville	Y	Y	1

Appendix VI: Summary of 2005 Bald Eagle survey results for the Eastern Shore. See methods section for definition of “occupied territory” and “active nest”.

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
AC-00-01	Accomack	Chincoteague W.	Y	Y	0
AC-02-02	Accomack	Hallwood	Y	Y	2
AC-03-05	Accomack	Parksley	Y	Y	2
AC-03-06	Accomack	Chesconnessex	Y	Y	2
AC-03-07	Accomack	Tangier Island	Y	Y	1
AC-03-10	Accomack	Nassawaddox	Y	Y	0
AC-04-02	Accomack	Metomkin Inlet	Y	Y	0
AC-04-03	Accomack	Hallwood	Y	Y	2
AC-04-04	Accomack	Saxis	Y	Y	2
AC-04-05	Accomack	Parksley	Y	Y	2
AC-05-01	Accomack	Pungoteague	Y	Y	1
AC-91-02	Accomack	Jamesville	Y	Y	2
AC-93-01	Accomack	Pungoteague	Y	Y	2
AC-93-03	Accomack	Parksley	Y	Y	3
AC-94-01	Accomack	Chincoteague W.	Y	Y	1
AC-94-02	Accomack	Chincoteague E.	Y	Y	2
AC-97-03	Accomack	Chincoteague W.	Y	Y	0
AC-98-02	Accomack	Pungoteague	Y	N	-----
AC-99-02	Accomack	Accomac	Y	Y	1
NT-00-01	Northampton	Jamesville	Y	Y	0
NT-01-01	Northampton	Cheriton	Y	Y	1
NT-02-01	Northampton	Cheriton	Y	Y	3
NT-02-02	Northampton	Cheriton	Y	Y	3
NT-03-01	Northampton	Cheriton	Y	Y	0
NT-03-03	Northampton	Jamesville	Y	Y	1
NT-04-01	Northampton	Exmore	Y	Y	3
NT-04-02	Northampton	Pungoteague	Y	Y	2
NT-05-02	Northampton	Cape Charles	Y	Y	0
NT-94-03	Northampton	Townsend	Y	Y	2
NT-96-01	Northampton	Cheriton	Y	Y	2
NT-97-01	Northampton	Townsend	Y	Y	2

Appendix VII: Summary of 2005 Bald Eagle survey results for lower tidewater. See methods section for definition of “occupied territory” and “active nest”.

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
CP-03-01	Chesapeake City	Bowers Hill	Y	Y	0
CP-03-03	Chesapeake City	Pleasant Ridge	Y	Y	2
CP-04-01	Chesapeake City	Deep Creek	Y	Y	2
NO-03-01	Norfolk City	Little Creek	Y	Y	1
SK-99-01	Suffolk City	Lake Drummond	Y	Y	1
VB-97-01	VA Beach City	Kempsville	Y	Y	2
VB-99-01	VA Beach City	Creeds	Y	Y	3
VB-00-01	VA Beach City	North Bay	Y	Y	2
VB-02-01	VA Beach City	Cape Henry	Y	Y	2
VB-02-02	VA Beach City	Pleasant Ridge	Y	Y	2
VB-03-01	VA Beach City	Kempsville	Y	Y	0
VB-04-01	VA Beach City	Virginia Beach	Y	N	-----
VB-05-01	VA Beach City	Knotts Island	Y	Y	2

Appendix VIII: Summary of 2005 Bald Eagle survey results for inland nests. See methods section for definition of “occupied territory” and “active nest”.

Nest Code	County	Topo Quad	Occupied Territory	Active Nest	Chicks Produced
AH-01-01	Amherst	Lynchburg	Y	Y	2
AL-98-01	Albemarle	Simeon	NC	NC	NC
BA-93-01	Bath	Mountain Grove	NC	NC	NC
BA-99-01	Bath	Sunrise	NC	NC	NC
BE-03-01	Amherst	Lynchburg	Y	Y	1
CD-03-01	Chesterfield	Hallsboro	Y	N	-----
CD-03-02	Chesterfield	Winterpock	Y	Y	0
CL-04-01	Clarke	Ashby Gap	NC	NC	NC
CL-04-02	Clarke	Ashby Gap	NC	NC	NC
CU-04-01	Culpepper	Stratford Hall	NC	NC	NC
CU-97-01	Culpepper	Rapidan	NC	NC	NC
HF-01-01	Halifax	Buffalo Springs	NC	NC	NC
HF-03-01	Halifax	Omega	Y	Y	2
HF-98-01	Halifax	Buffalo Springs	Y	Y	2
LO-02-01	Louisa	Mineral	NC	NC	NC
LO-05-01	Louisa	Leesburg	Y	Y	≥1
ME-00-02	Mecklenburg	John H. Kerr	Y	Y	2
ME-02-01	Mecklenburg	Bracey	Y	Y	1
ME-04-01	Mecklenburg	Tungsten	Y	Y	2
ME-04-02	Mecklenburg	Boydton	Y	Y	2
ME-05-01	Mecklenburg	Tungsten	Y	Y	2
ME-05-02	Mecklenburg	John H. Kerr	Y	Y	2
ME-97-01	Mecklenburg	Clacksville North	Y	Y	2
NO-99-01	Nottoway	Danieltown	Y	?	?
PA-03-01	Page	Rileyville	NC	NC	NC
PE-96-01	Prince Edward	Green Bay	Y	Y	3
PV-03-01	Pittsylvania	Straightstone	NC	NC	NC
PW-98-03	Prince William	Thoroughfare Gp	NC	NC	NC
SH-02-01	Shenandoah	Strasburg	NC	NC	NC
SO-01-01	Southampton	Riverdale	Y	Y	2
SS-02-01	Sussex	Waverly	Y	Y	0