

A note to teachers

The Eagle Journal is provided for you to use with your class while watching the eagles at Norfolk Botanical Garden. You can create a class log of observations made while watching the eagles, or make a copy for each student and encourage them to fill in the pages as they watch the eagles from home in the evening or on weekends. Print the journal front to back and fold in half to make a 12 page booklet.

This nest is one of over 560 eagle nests in the Commonwealth. Virginia's eagles average just over 1 eaglet per nest. Eagles have made a remarkable recovery over the past 30 years with the number of nests increasing from 31 in 1977 to 560 in 2007. We encourage your students to read the on-line Blog from our biologist and to participate in the chat room. If you have additional questions about the eagles please let us know.

For additional information about eagles and other wildlife species visit our website at www.dgif.virginia.gov.



Bald Eagle Journal

As observed by:



The Eagles are nesting at the Norfolk Botanical Gardens in Norfolk, Virginia
<http://www.dgif.virginia.gov/eaglecam/>

Fun Eagle Facts

The bald eagle is not really bald. "Bald" is from an obsolete English word meaning white. Bald eagles do not attain their white head and tail feathers until their 5th year of age. Immature birds undergo progressive annual changes in plumage pattern from uniformly dark brown their first year to extensive white and brown mottling in their fourth year. Other notable characteristics include a large downward-curving yellow bill, and yellow feet with sharp talons for catching prey.

- **Size:** Size increases with latitude; Alaskan birds are noticeably larger.
- **Weight:** Males 7-10 pounds, Females up to 14 pounds
- **Wingspan:** Males greater than 6 feet Females up to 8 feet
- **Age (record longevity):** 28 years in wild, 36 years in captivity

Eagle Nest's and Fledglings by Year

Date	Active Nests	Young Fledged
1977	31	18
1978	36	18
1979	34	20
1980	35	35
1981	39	40
1982	45	40
1983	52	51
1984	60	57
1985	65	84
1986	66	83
1987	73	107
1988	80	118
1989	92	88
1990	104	142
1991	110	153
1992	131	141
1993	149	172
1994	144	158
1995	154	223
1996	180	243
1997	214	321
1998	229	314
1999	230	326
2000	270	414
2001	312	465
2002	329	501
2003	371	454
2004	401	612
2005	429	657
2006	469	709
2007	560	737

A Day At The Nest

Visitors:

In the past, this eagle pair has been visited by crows, a squirrel, a red tail hawk and a great horned owl. Many of the visits have been made while the eagles were elsewhere.

Discuss with others what might happen if each of these species visits while the eagles are at the nest site.

Food:

Eagles are predatory birds and are opportunists; feeding on a wide variety of species even those animals killed by cars when available. This pair seems to prefer fish and gulls. What species and how many of each is brought to the nest.

Food Item	Number
Fish	
Gulls	

Adaptations

Eagles are birds of prey, meaning that they eat other animals. Carefully observe the parents and eaglets and record observations below.

The bill of the eagle is _____ and is used for _____.

The talons or feet are _____ and are used for _____.

Other observations:

Today, the pair of eagles....

Date: _____ Time: _____

Date: _____ Time: _____

Date: _____ Time: _____

Date: _____ Time: _____

Date: _____ Time: _____

First Flight

The eaglets will spend several weeks exercising their wings before they actually leave the nest and fly on their own.

Record the # of practice days before the fledglings leave the nest.

First day of practice: _____

Date of first flight: _____

Total number of practice days: _____

Watch one of the eagles practice flapping its wings for one minute.

How many times did it flap during this time period?

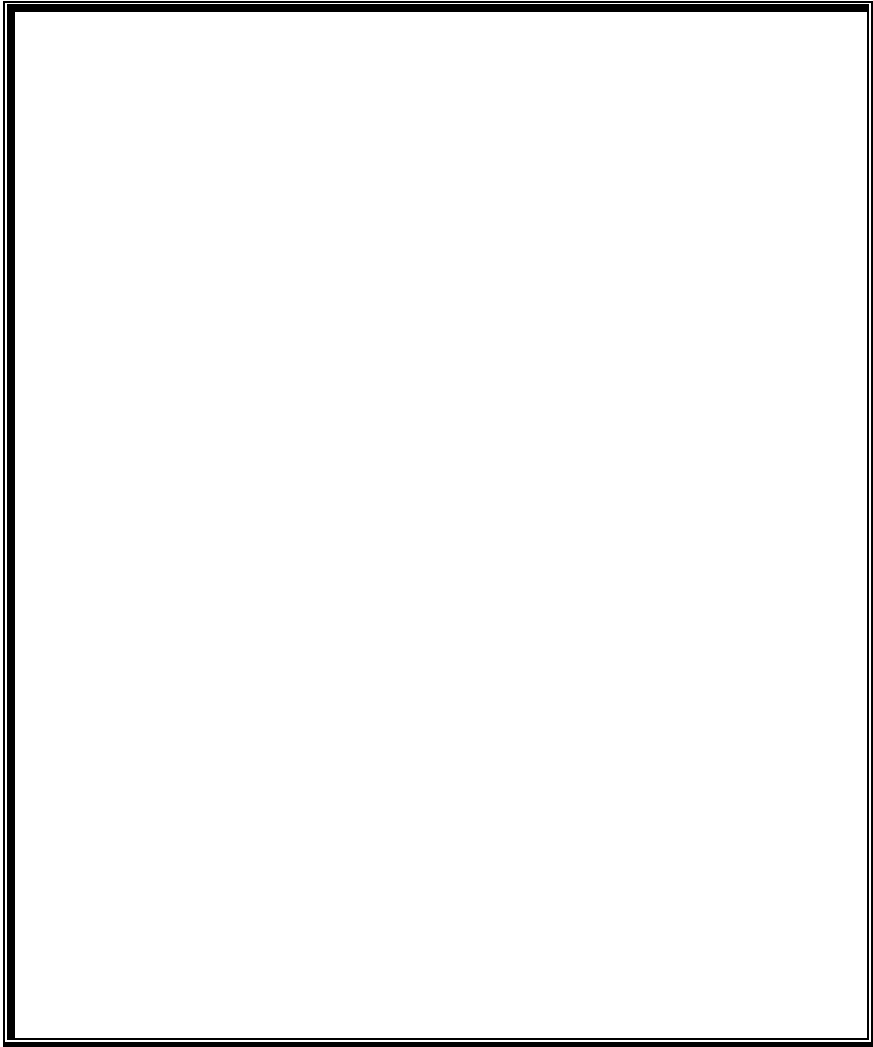
How many times did the eaglets practice in one hour? _____

"Flap" your arms for a minute. How many times did you flap your arms in this time period? _____

Were your arms tired? _____

Birds use their wings to get around. If they were to walk like we do their legs would be tired.

Draw a picture of the most interesting day for the eaglets.



Date:

Time:

Date:

Time:

Date:

Time:

Date:

Time:

Date:

Time:

Hatching Day

About six weeks after the eggs are laid the eaglets will begin to hatch. The female began incubating the eggs on _____.

Watch carefully and note the time and date each egg hatches.

Egg	Date	Time	Weight at banding	Band number
1				
2				
3				

Sometimes an egg will not hatch at all. This is common and is nothing to worry about.

Banding Day

The eaglets will be removed from the nest to be banded so we can follow them in the future. This year's eaglets were banded on _____. Record their weight above. If the nest was measured record it here.



Eagle Math

The eggs have hatched and the young eagles are hungry. The parents will bring food to the young for 14 or more hours each day. A special light on the nest will allow us to watch at night for the first time.

Watch the eagle cam for one hour to determine how many times the eaglets are fed.

Time of day I watched the eagles _____

Number of visits made to the nest during the hour. _____

_____ (Number of visits in one hour)

X

_____ (Number of active hours per day)

=

_____ (Number of feeding visits per day)

Do this activity again when the eaglets are older. Do the parents make more or fewer trips as the chicks grow?