

2022

## **An assessment of the Bald Eagle and Great Blue Heron breeding populations along High Rock, Tuckertown, Narrows, and Falls Reservoirs in central North Carolina: 2022 breeding season**

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**AN ASSESSMENT OF THE BALD EAGLE AND GREAT BLUE HERON BREEDING  
POPULATIONS ALONG HIGH ROCK, TUCKERTOWN, NARROWS, AND FALLS  
RESERVOIRS IN CENTRAL NORTH CAROLINA: 2022 BREEDING SEASON**

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## **Background and Context**

Historically, the Bald Eagle was a common breeding species along major river systems, lakes and coastal areas throughout much of North America. The widespread use of persistent pesticides for crop management in the region resulted in dramatic declines over a 30-40 year period. By the late 1960s, most breeding populations were decimated by eggshell thinning and associated low productivity. Concern for these populations prompted the elevation of the Bald Eagle to endangered status and led to a national effort to restore historic populations. Since the nationwide ban on many persistent pesticides in 1972, eagle populations have experienced gradual recoveries in productivity and total numbers. The state of North Carolina has seen an increase of breeding pairs since the late 1960s, when no breeding pairs of bald eagle were present in the state.

Work conducted by The Center for Conservation Biology in 1995 and 1996 at the Yadkin Project (FERC #2197) identified areas of consistent use by eagles in inland areas of North Carolina and suggested that nesting activity should be anticipated in the Yadkin-Pee Dee River basin. A survey of this system in 2001 provided confirmation of these suggestions. Since that survey, annual efforts to monitor this population have continued. Results of the 2022 survey follow (a summary of all eagle nesting activity since 2001 and Great Blue Heron/Great Egret/Double-crested Cormorant nesting activity since 2001 is provided at the end of this report).

## **Objectives**

The objectives of the annual eagle survey on the Yadkin Project reservoirs are:

- 1) To document the status, distribution and productivity of nesting pairs in association with the Yadkin reservoirs and associated river corridors.
- 2) To increase our understanding of Bald Eagle natural history in interior regions of North Carolina.
- 3) To determine the status and distribution of breeding Great Blue Herons (and associated Great Egrets and Double-crested Cormorants) within the Yadkin Project reservoirs.

## **METHODS**

### **Bald Eagle Survey Coverage:**

Waterways covered by the Bald Eagle survey of 2022 included the four Yadkin Project reservoirs:

- 1) High Rock Reservoir, 2) Tuckertown Reservoir, 3) Narrows Reservoir (Badin Lake), and 4) Falls Reservoir. The survey of High Rock Reservoir included the waterways between, and the mouth of, Grants Creek above I85 and the High Rock Reservoir Dam. The survey of Tuckertown

Reservoir included waterways between the High Rock Reservoir Dam and the Tuckertown Dam. The survey of Narrows Reservoir included the waterways between Tuckertown Dam and Narrows Dam (Badin Dam). The survey of Falls Reservoir included the waterway between Narrows Dam to 1 KM below Falls Dam.

### **Bald Eagle Nest Survey:**

All major waterways and tributaries associated with the study system were surveyed for breeding Bald Eagles. A high-wing Cessna 172 aircraft was used to systematically overfly the land surface at an altitude of approximately 100 m to detect eagle nests. Flights were flown between the shoreline and 1 km inland to cover the most probable breeding locations for Bald Eagles. All nests detected were plotted on recent aerial imagery using GPS enabled tablet computers and given a unique alpha-numeric code. Each nest was examined to determine its structural condition, the type and condition of nest tree, and the condition of the surrounding landscape. The areas were searched for Bald Eagles and all detections were recorded. The Bald Eagle nest survey was conducted on 29 March 2022.

### **Bald Eagle Productivity Survey:**

All active Bald Eagle nests were rechecked to determine productivity. A Cessna 172 aircraft was used to fly low over nests to allow observers to examine nest contents and determine structural condition. The number of eaglets present was recorded along with their approximate ages. Observations of all Bald Eagles detected were recorded. The Bald Eagle productivity survey was conducted on 2 June 2022.

### **Great Blue Heron Survey:**

Breeding colonies of Great Blue Herons detected during survey flights were mapped and recorded. Colony locations were plotted on recent aerial imagery using GPS enabled tablet computers. Colonies were examined for size, substrate use, and breeding stage. If an accurate estimate was not possible by observation or photographic review, colony size estimates were rounded off using a graded scale as follows. A total count was made for colonies < 20 pairs. Estimates for colonies > 20 pairs were rounded off using a graded scale: nearest 5 for < 50, nearest 10 for 50– 200, nearest 25 for 200–450. These surveys were conducted on 29 March and 2 June 2022.

## RESULTS:

### High Rock Reservoir

#### Bald Eagles

Six Bald Eagle territories were observed to be occupied on High Rock Reservoir during 2022 surveys. These territories consisted of 6 previously known nests, all of which were active. The pair that likely moved to DA-21-01 in 2021, moved back to DA-20-01 and successfully nested. Nest DA-20-02, located in close proximity to roads and houses and active for the past 2 years was not active this year. Construction is almost complete on the new house being built directly adjacent to nest DA-17-01. Despite the construction, nest DA-17-01 was active and produced a single chick.

Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
DA-01-01	Davidson	Southmont	Y	N	N/A

#### Nest Location

This nest now absent nest was located along the east shoreline almost due east of Trading Ford at 35.694205, -80.328. The now fallen nest tree was positioned on a bluff above the reservoir in a large dead white oak tree. Nest was likely visible from the water from within the adjacent cove.

#### Nesting Activity

*Bird Activity* – On 20 March 2019, it was observed that the nest tree had fallen. This pair continues to nest in DA-19-02, a replacement nest built in a large hardwood tree approximately 200m southeast of the old nest tree.

*Nest Condition* – Nest is now absent

#### Nest Substrate

*Substrate Type* – Nest was built in a large white oak tree.

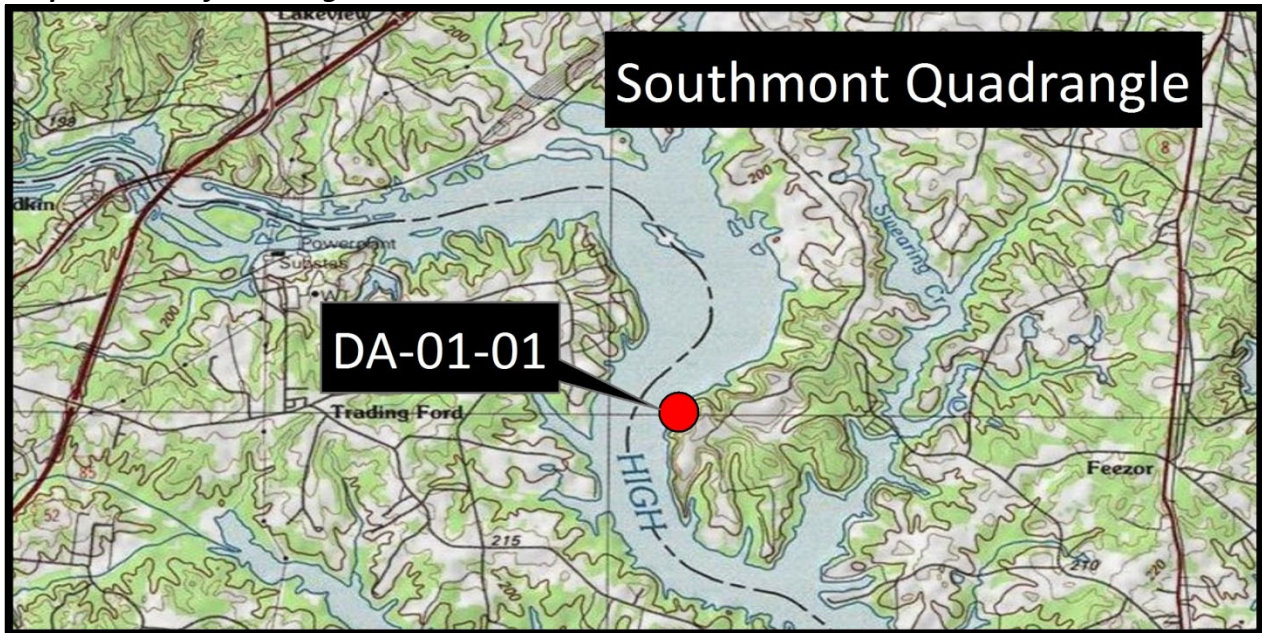
*Nest Position* – Nest was positioned in a deep stable crotch. Nest tree was on a knoll and in a super canopy position above surrounding trees. Nest tree has a commanding position on the landscape. Nest formerly had a deciduous crown, but now absent

*Substrate Condition* – During the second flight in 2009, it appeared that the tree had been hit by lightning and was dying. The dead tree finally succumbed to decay and fell prior to the 2019 survey.

**Potential Disturbance**

Nest was easily visible and in a dead tree. Nest tree was set back from shoreline such that disturbance from water should not have been significant. The nest tree was in a remote location with a buffer on the upland side. Disturbance potential appeared to be limited.

***Map location of Bald Eagle nest DA-01-01.***



Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
DA-19-02	Davidson	Southmont	Y	Y	2

**Nest Location**

This nest is located along the east shoreline almost due east of Trading Ford, approximately 200m southeast of the old nest tree (DA-01-01). The nest tree is positioned on a bluff above the reservoir in a large hardwood tree. Nest is likely visible from the water only during periods of leaf off.

**Nesting Activity**

*Bird Activity* – On 29 March 2022 an adult was observed brooding small chicks on the nest.

*Nest Condition* – On 29 March 2022, this nest was observed to have been rebuilt on top of a portion of the nest that was damaged in 2021.

***Aerial photo of nest DA-01-01 (photo 2012; B. Watts)***



**Nest Substrate**

*Substrate Type* – Nest was built in a large hardwood tree.

*Nest Position* – Nest is positioned in a deep stable crotch. Nest tree was on a knoll and in a super canopy position above surrounding trees. Similar to the old nest, this nest tree has a commanding position on the landscape.

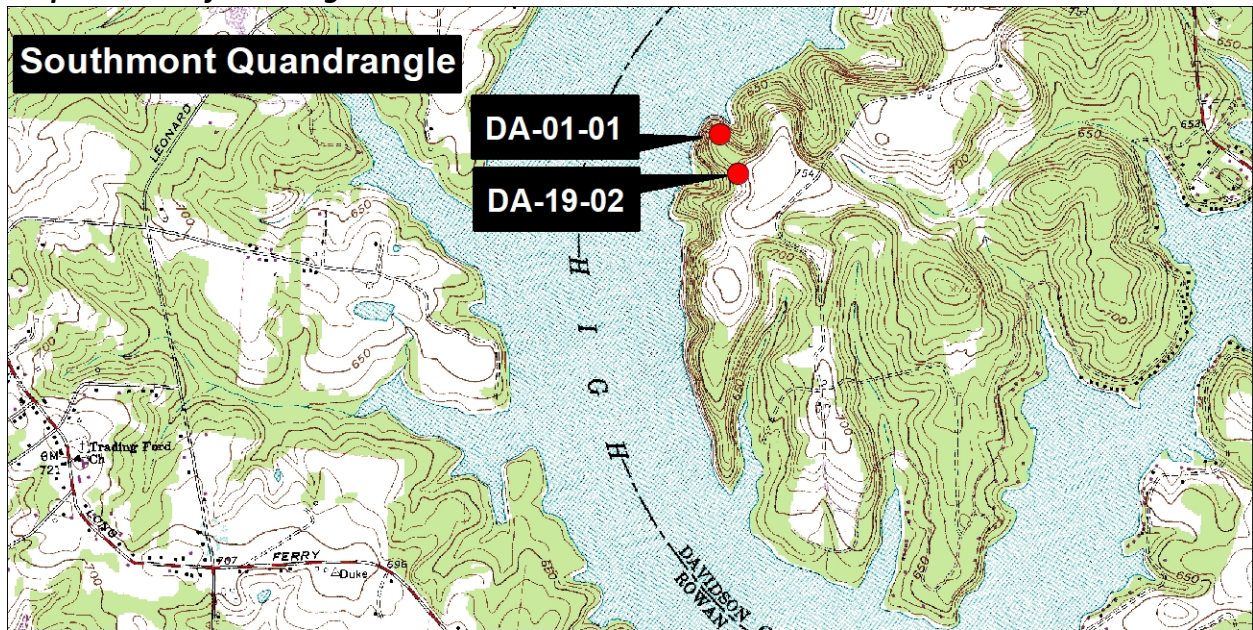
*Substrate Condition* – The nest tree was in good condition.

**Potential Disturbance**

Nest is likely visible from the water during periods of leaf off. Nest tree is set back from shoreline such that disturbance from water should not be significant. Nest tree is in a remote location with a buffer on the upland side. Disturbance potential appears to be limited.



**Map location of Bald Eagle nest DA-19-02.**



**Aerial photo of nest DA-19-02 (photo 2019; B. Paxton)**



<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
RO-10-01	Rowan	Gold Hill	Y	Y	2

**Nest Location**

This nest is located along the edge of a clear-cut within a buffer strip of loblolly pines between the clear-cut and the water at 35.622103, -80.271114. The nest is between St. Matthews Church and Panther Creek, northwest and across the clear-cut from the former territory RO-02-01. The tree may not be visible from the water due to a pine buffer along the shoreline and there are no public roads near this site.

**Nesting Activity**

*Bird Activity* – On both 29 March 2022, 2 large 6 week old chicks were observed in the nest. On 2 June 2022 those 2 chick had fledged.

*Nest Condition* – The nest appeared in good condition.

**Nest Substrate**

*Substrate Type* – Nest was built in a relatively young loblolly pine tree. The tree was positioned along the edge of a pine buffer between a regenerating pine stand and the water. Access into the nest was clearly from the upland side.

*Nest Position* – The nest was built in a top crotch of a young loblolly pine. Although the nest was near the crown, it was shaded with only 30-40% sky exposure.

*Substrate Condition* – Nest tree was in good condition.

**Potential Disturbance**

The nest tree was along the edge of a recent clear-cut. The site is remote from human disturbance. There is no road access into the site and it is unlikely that the nest is visible from the water due to a tree buffer along the shoreline.



**Map location of Bald Eagle nest RO-10-01.**



**Aerial photo of nest RO-10-01 (photo 2013. B. Paxton)**



<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
DA-17-01	Davidson	Grist Mountain	Y	Y	1

**Nest Location**

This nest is located in an oak on the wooded bluff of the east shoreline of Abbotts Creek, near the mouth of a small tributary at 35.730622, -80.240623. The nest is located approximately 75 meters NNE of a house on Old Mountain Road. In 2021, trees had been cleared for construction of a new house immediately adjacent to the nest. In 2022, construction of this new home was almost complete.

**Nesting Activity**

*Bird Activity* – On 29 March 2022, a single chick approximately 5 weeks old was observed in the nest with an adult tending. On 2 June 2022, that single chick had already fledged.

*Nest Condition* – On both 29 March and 2 June May 2022, the nest appeared in good condition.

**Nest Substrate**

*Substrate Type* – Nest was built in a mature oak tree. The tree was positioned on a well-wooded bluff of the east shoreline of Abbotts Creek, near the mouth of a small tributary. In 2021, much of that well wooded bluff was cleared for a new house.

*Nest Position* – The nest was built in the main crotch of a mature oak. Visibility into the nest is greatly reduced after leaf out.

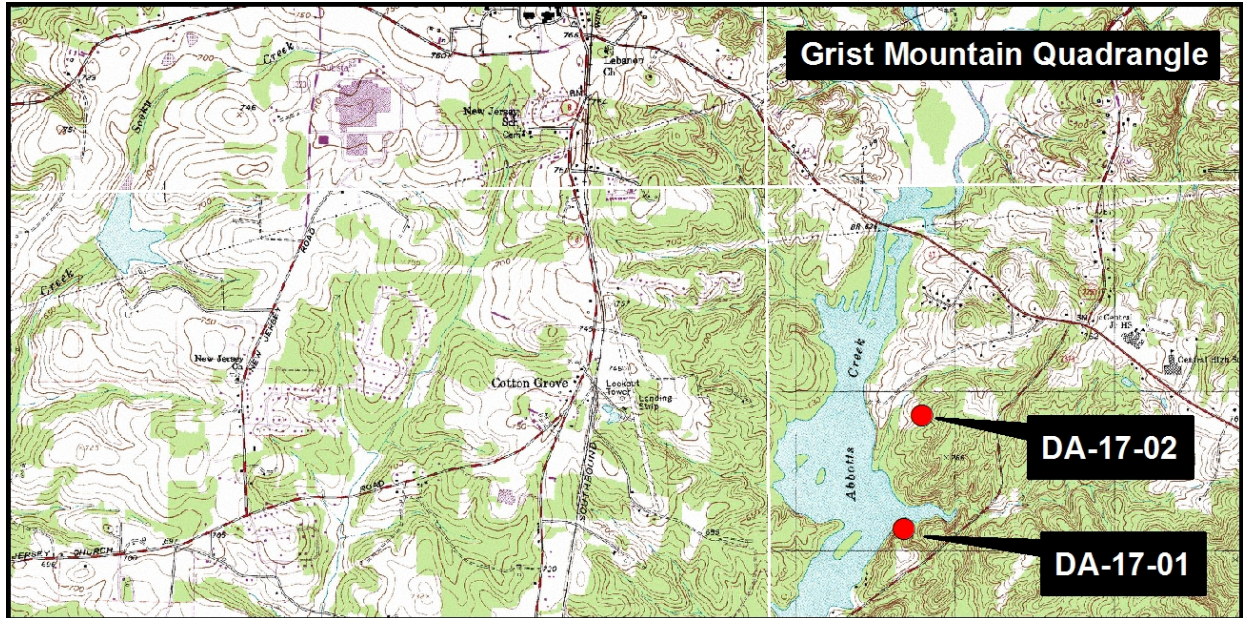
*Substrate Condition* – Nest tree was in good condition.

**Potential Disturbance**

While most likely visible from the water prior to leaf out, access to the nest would be limited due to the steep bank. The most likely disturbance issue would be the existing house located approximately 75 meters south of the nest and the new home immediately adjacent to the nest. Construction and clearing may have occurred outside of the breeding time window.



**Map location of Bald Eagle nest DA-17-01.**



**Aerial photo of nest DA-17-01 (photo 2022. B. Paxton)**



<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
DA-17-02	Davidson	Grist Mountain	Y	N	N/A

**Nest Location**

This now absent nest was located in an oak on the edge of a recent clear cut on the east side of Abbotts Creek, approximately 700m north of DA-17-01 at 35.737014, -80.239248.

**Nesting Activity**

*Bird Activity* – No birds were observed at the nest site on either flight. This nest is most likely a nest previously used by the pair currently occupying nest DA-17-01.

*Nest Condition* – Nest is absent.

**Nest Substrate**

*Substrate Type* – Nest was built in a mature oak tree. The tree was positioned on the north edge of a recent clear cut on the east side of Abbotts Creek.

*Nest Position* – The nest was built the main crotch of a mature oak. Visibility into this nest would be greatly reduced after leaf out. The position and location of this nest within a hardwood forest block prevented detection prior to non-Project related timbering activities.

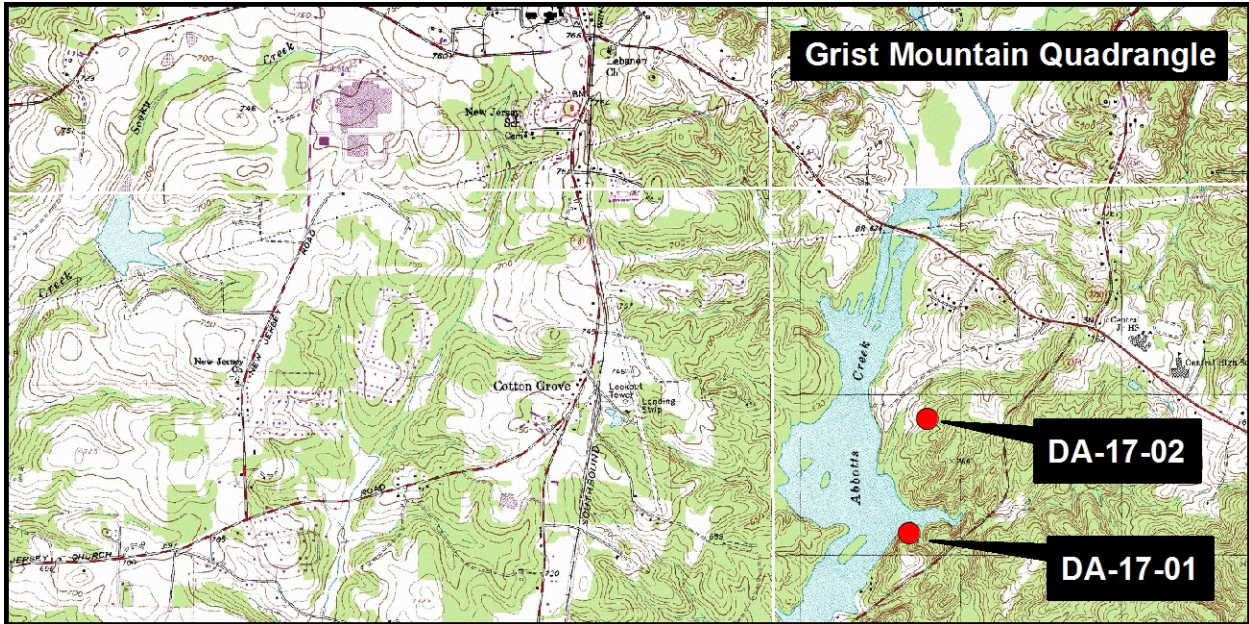
*Substrate Condition* – Nest tree was in good condition.

**Potential Disturbance**

This nest was located in what used to be a large hardwood block of forest and would not have been visible from roads or water. Disturbance due to timbering activities likely caused this pair to move to the current DA-17-01 nest.



**Map location of Bald Eagle nest DA-17-02.**



**Aerial photo of nest DA-17-02 (photo 2017. B. Paxton)**



<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
RO-18-01	Rowan	Southmont	Y	N	N/A

**Nest Location**

This now absent nest was located in a young tall pine on the shore of a point land at the southern mouth of Second Creek, north of a newly cleared lane from Scout Road. This nest was at coordinates 35.62685, -80.27739. The pair that used to occupy this nest could be the pair now occupying nest RO-20-01.

**Nesting Activity**

*Bird Activity* – No bird activity was observed at this now absent nest.

*Nest Condition* – Nest was absent.

**Nest Substrate**

*Substrate Type* – This now absent nest was built in a tall, thin, young pine tree. The tree is positioned midway between the shore and a newly cleared lane on Scout Road.

*Nest Position* – This now absent nest was built high in the crotch of a tall, thin, young pine tree. Visibility into this nest was good from certain angles, but thick young canopy also obscured it from some angles.

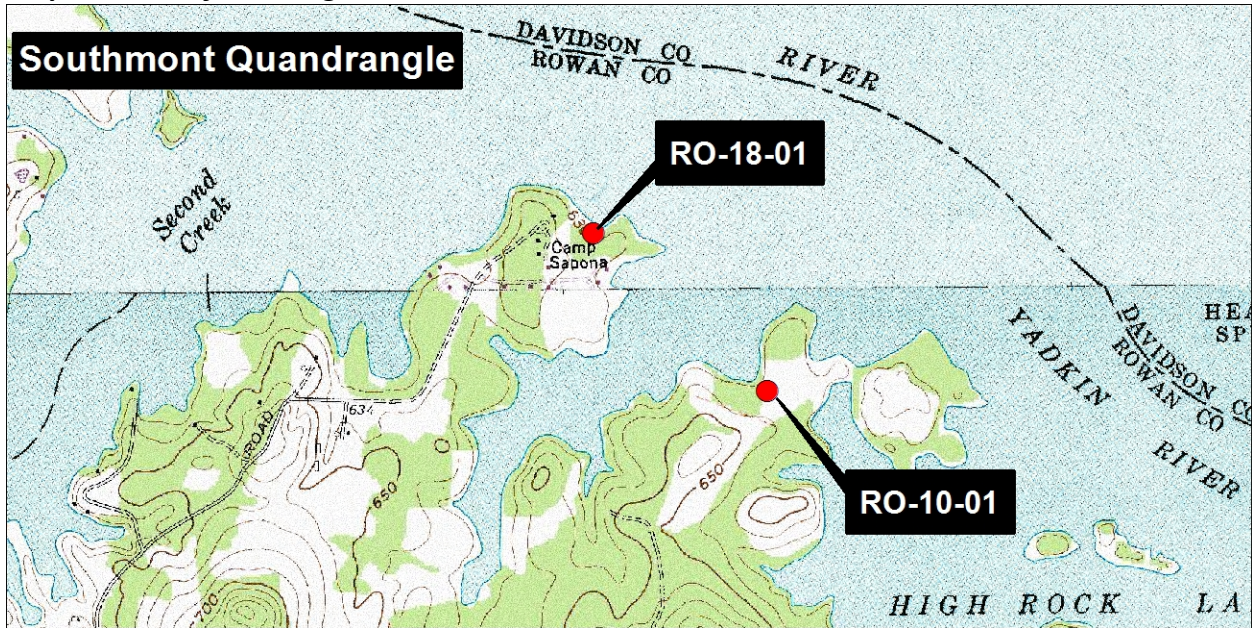
*Substrate Condition* – Nest tree was in good condition.

**Potential Disturbance**

This now absent nest was located midway between the shore and a newly cleared lane on Scout Road. The nest is likely visible from both the water and the houses on Boating Terrace. The nest could be accessed by either water or road.



**Map location of Bald Eagle nest RO-18-01.**



**Aerial photo of nest RO-18-01 (photo 2018. B. Paxton)**



<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
DA-19-01	Davidson	Grist Mountain	N	N	N/A

**Nest Location**

This nest was located in a mature tall pine inland of the northwest shore of Flat Swamp Creek, on the north edge of a recent clear cut.

**Nesting Activity**

*Bird Activity* – No bird activity was noted at this now absent nest.

*Nest Condition* – This nest is now absent.

**Nest Substrate**

*Substrate Type* – This nest was built in a tall, mature pine tree. The tree is positioned on the north edge of a recent clear cut.

*Nest Position* – This nest was positioned high in the tree on a lateral branch, facing the recent clearcut. Visibility into this nest was good from the clearcut

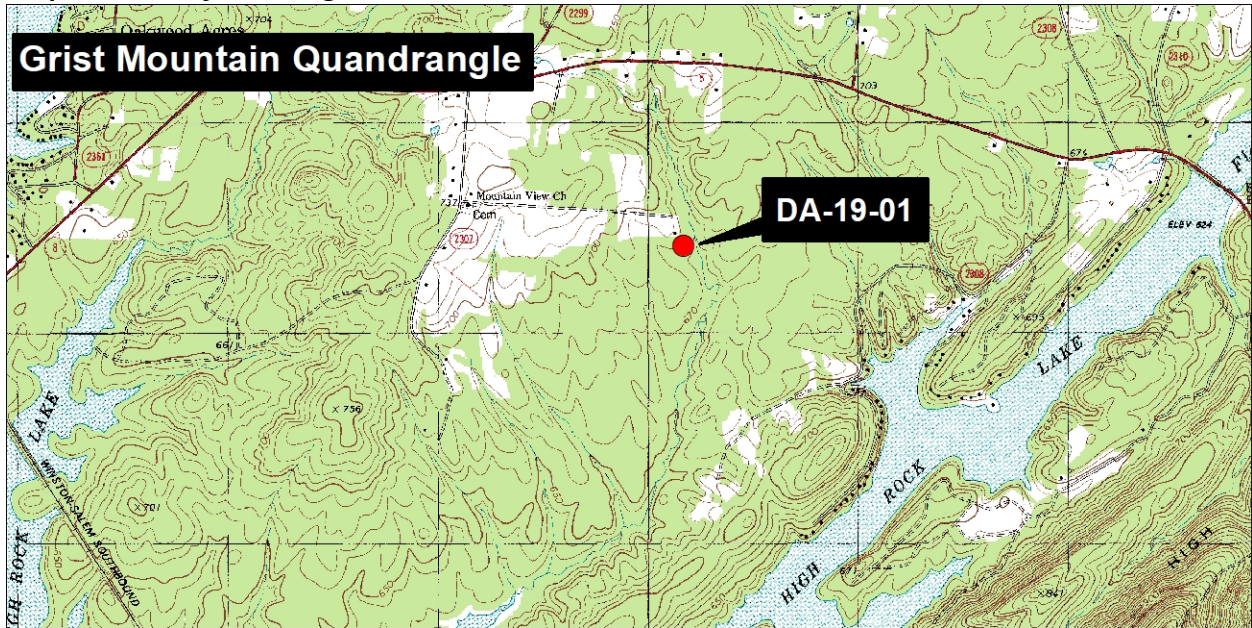
*Substrate Condition* – Nest tree was in good condition.

**Potential Disturbance**

This now absent nest was located approximately 100m south of an existing house and out buildings. Mature woods separated the nest from the house. The nest was not likely visible from the house and disturbance is not likely.



**Map location of Bald Eagle nest DA-19-01.**



**Aerial photo of nest DA-19-01 (photo 2019. B. Paxton)**



<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
DA-20-01	Davidson	Grist Mountain	Y	Y	2

**Nest Location**

This nest is located in a medium aged tall pine within a recently thinned patch of pines. The nest is on a point between two tributaries, south of Oakwood Acres.

**Nesting Activity**

*Bird Activity* – On 29 March 2022, 2 chicks approximately 5 weeks old were observed in this nest. On 2 June 2022, the chicks had fledged. It is likely that this eagle pair used nest DA-21-01 in 2021, repaired, and returned to this nest in 2022.

*Nest Condition* – Nest had been repaired and was in good condition.

**Nest Substrate**

*Substrate Type* – This nest was built in a tall, medium aged pine tree. The tree is positioned in the center of a recently thinned patch.

*Nest Position* – This nest is positioned high in the tree near the terminal crown. Visibility into this nest is good from directly overhead.

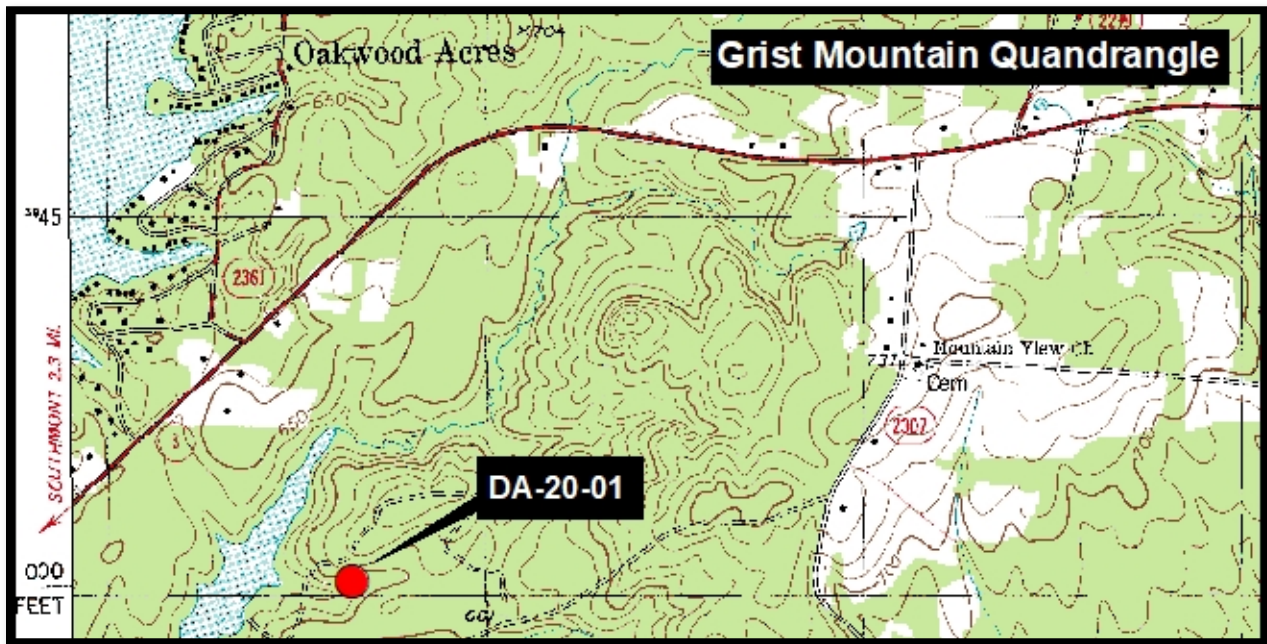
*Substrate Condition* – Nest tree was in good condition.

**Potential Disturbance**

This nest is located over 200m from the nearest shoreline. The nest is not likely visible from the water and there are no major roads nearby.



**Map location of Bald Eagle nest DA-20-01.**



**Aerial photo of nest DA-20-01 (2019; B. Paxton).**



<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
DA-20-02	Davidson	Southmont	N	N	N/A

**Nest Location**

This nest is located in mature hardwood between Holloway Church Road and houses on Jess Cross Road. The nest is approximately 300m south of Holloway Church Road Bridge.

**Nesting Activity**

*Bird Activity* – – No eagle activity was observed at this nest in 2022.

*Nest Condition* – Nest appeared in good condition.

**Nest Substrate**

*Substrate Type* – This nest was built mature hardwood. The tree is positioned on the east side of Holloway Church Road.

*Nest Position* – This nest is positioned on a lateral branch that almost hangs over Holloway Church Road. Visibility into this nest is good prior to leaf out.

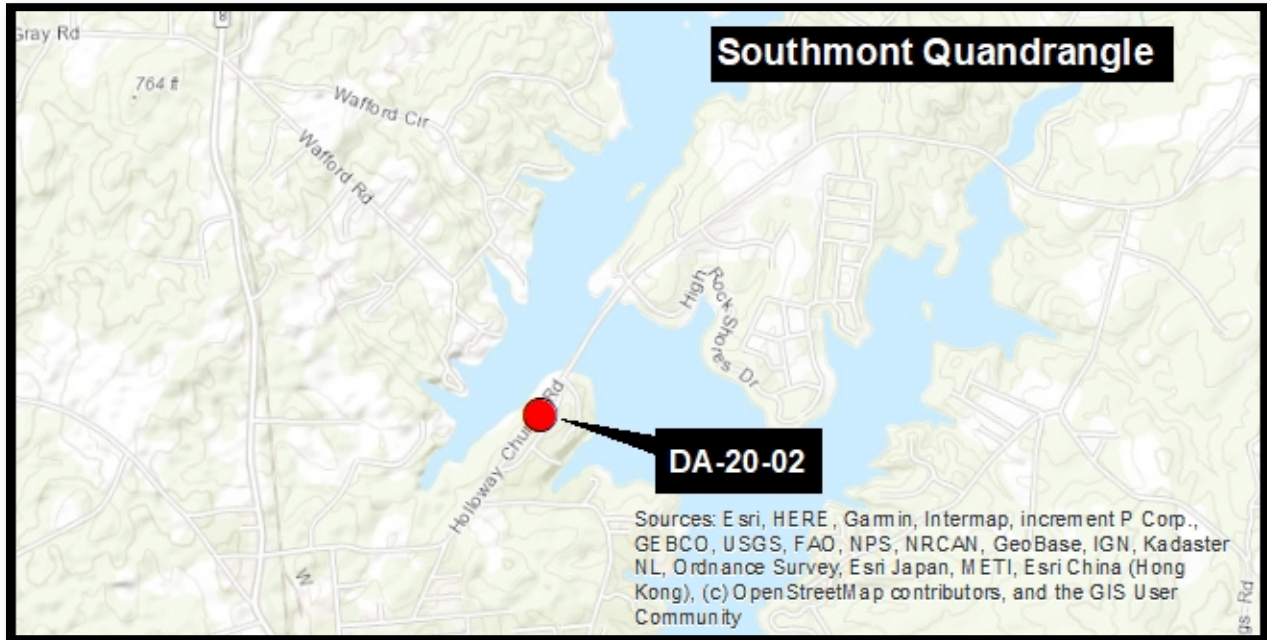
*Substrate Condition* – Nest tree seemed in good condition.

**Potential Disturbance**

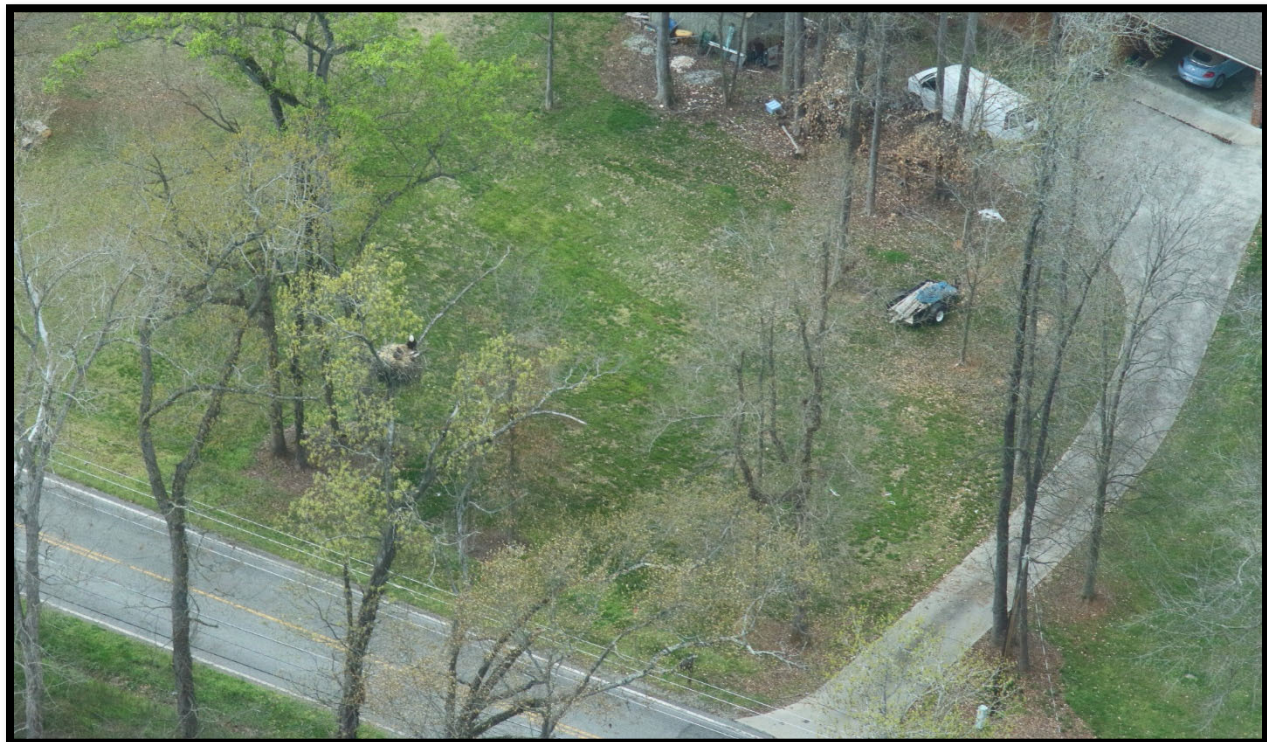
This nest is located in a developed area, beside a major road. Residents are surely aware of this nest. This pair must be very tolerant to disturbance.



**Map location of Bald Eagle nest DA-20-02.**



**Aerial photo of nest DA-20-02 (2020; B. Paxton).**



<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
RO-20-01	Rowan	Southmont	Y	Y	0

**Nest Location**

This nest was rebuilt in a young tall pine on the shore of a point land at the southern mouth of Second Creek, north of a newly cleared lane near Scout Road. This nest is located approximately 130m east of the now absent nest RO-18-01.

**Nesting Activity**

*Bird Activity* – On 29 March 2022, it appeared that there were 2 newly hatched chicks in the nest cup. However, on 3 June 2022 a better view into the nest revealed 2 unhatched eggs.

*Nest Condition* – Nest had been rebuilt and appeared in good condition.

**Nest Substrate**

*Substrate Type* – This nest was built in a tall, thin, young pine tree. The tree is positioned midway between the shore and a newly cleared lane near Scout Road.

*Nest Position* – This nest was built high in the crotch on the east side of a tall, thin, younger pine tree. Visibility into this nest was good looking from the east to the west.

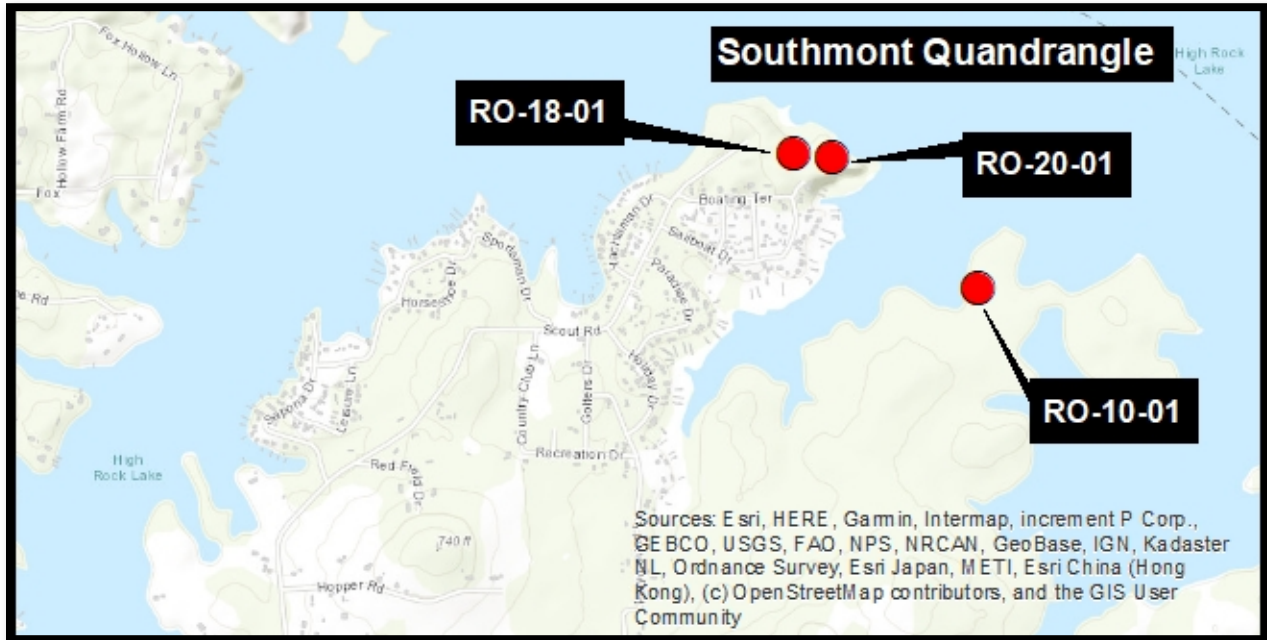
*Substrate Condition* – Nest tree was in good condition.

**Potential Disturbance**

The nest is likely visible from both the water and the houses on Boating Terrace. The nest could be accessed by either water or road.



**Map location of Bald Eagle nest RO-20-01.**



**Aerial photo of nest RO-20-01 (2020; B. Paxton).**



<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
DA-21-01	Davidson	Southmont	Y	N	N/A

**Nest Location**

This nest was built within a small stand of mature pines on a hardwood peninsula on the eastern side of the mouth of Abbott Creek. This nest was likely a replacement nest for DA-20-01 that was damaged in 2021. DA-20-01 has been repaired and is once again active.

**Nesting Activity**

*Bird Activity* – No bird activity was observed at this nest in 2022.

*Nest Condition* – Nest was in good condition.

**Nest Substrate**

*Substrate Type* – This nest was built in a tall mature pine tree. The nest tree is in a small patch of mature pines surrounded by hardwoods.

*Nest Position* – This nest was built very high in the top of the tree, with 100% exposure. Visibility into this nest is excellent.

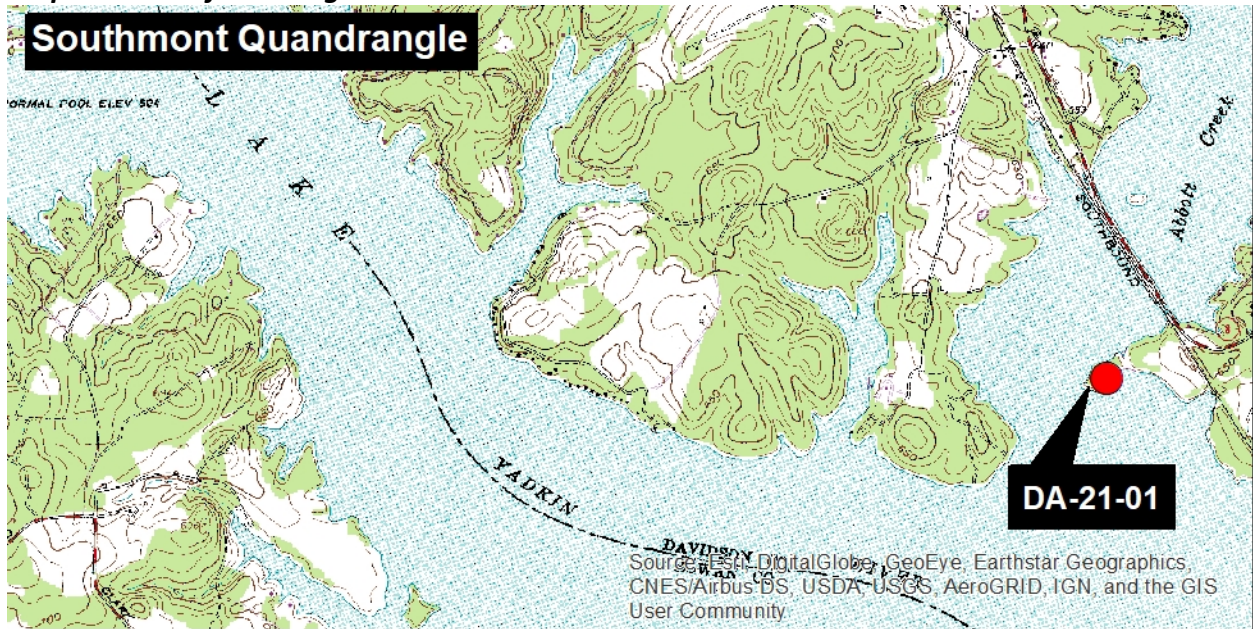
*Substrate Condition* – Nest tree was in good condition.

**Potential Disturbance**

The nest is likely visible from the water and could be easily accessed from the reservoir.



**Map location of Bald Eagle nest DA-21-01.**



**Aerial photo of nest DA-21-01 (2021; B. Paxton).**



<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
RO-21-02	Rowan	Southmont	Y	Y	2

**Nest Location**

This nest was built in a small patch of pines on the northern shore of Crane Creek on the shoreline of the back yard of 1190 Crane View Road.

**Nesting Activity**

*Bird Activity* – on 29 March 2022, 2 chicks approximately 5 weeks old were observed in the nest. By 2 June 2022, these chicks had fledged.

*Nest Condition* – Nest was in good condition.

**Nest Substrate**

*Substrate Type* – This nest was built in a tall mature pine tree on the shoreline of the back yard of 1190 Crane View Road.

*Nest Position* – This nest was built on a lateral branch on the southeast side of the tree, below the crown of the tree. Nest is exposed to the southeast and is only visible from that direction.

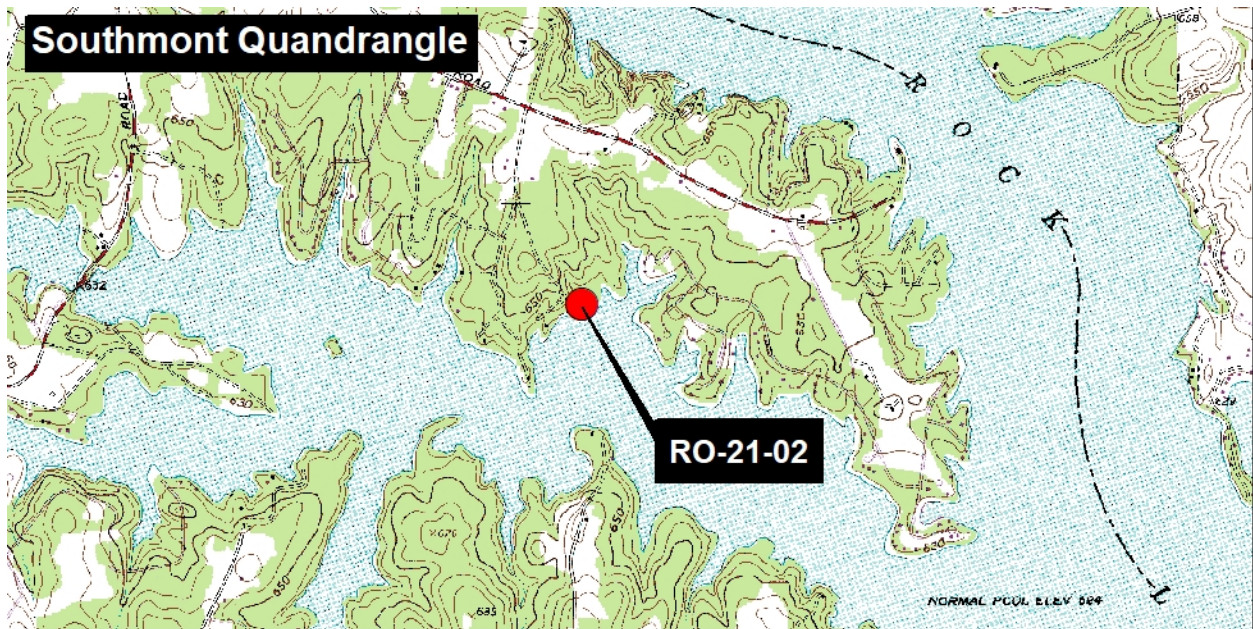
*Substrate Condition* – Nest tree was in good condition.

**Potential Disturbance**

The nest is likely visible from the water and from adjacent backyards and docks. This pair is likely tolerant of some disturbance to build in close proximity to houses and docks.



**Map location of Bald Eagle nest RO-21-02.**



**Aerial photo of nest RO-21-02 (2021; B. Paxton).**





## Great Blue Herons/Great Egrets

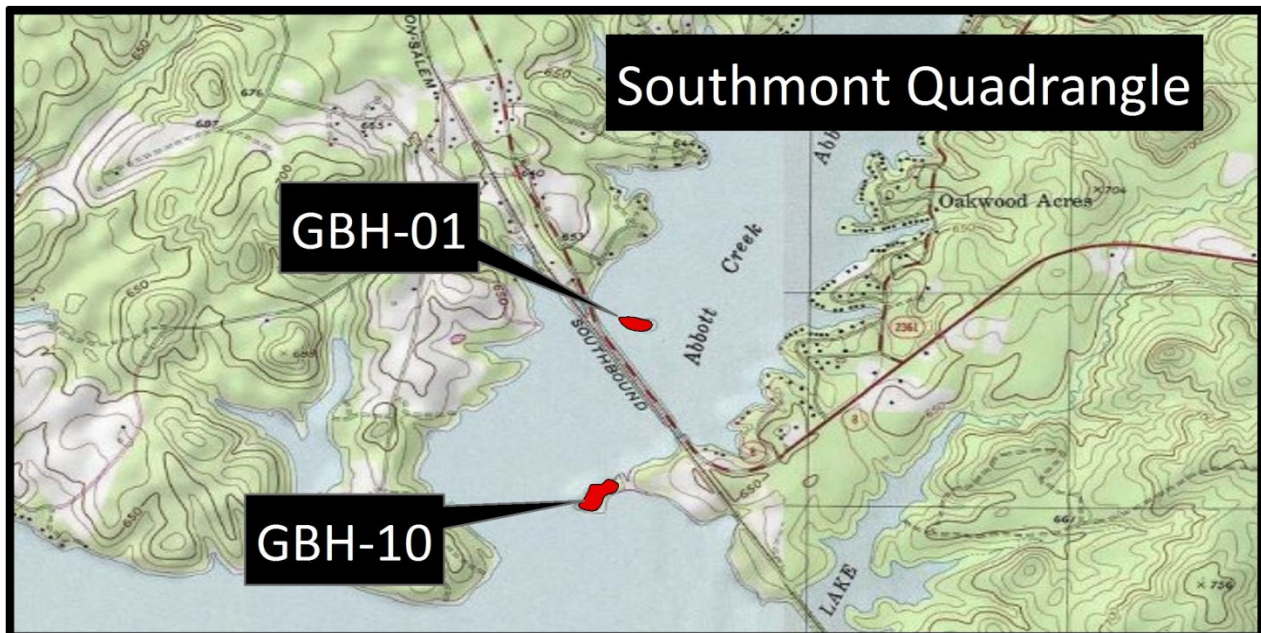
Seventeen active breeding colonies of Great Blue Herons (GBHE) were detected on High Rock Reservoir in 2022. The total population estimate for GBHE of 360 breeding pairs on this reservoir is a slight increase over the 2021 population. Colonies ranged in size between 1 and 120 Great Blue Heron pairs per colony. GBHE colonies continue to be dynamic, with the numbers of pairs within colonies fluctuating, smaller colonies being abandoned and absorbed into nearby larger colonies, and small colonies reappearing. The population of Great Egrets (GREG) in colony GBH-2 continues to slowly increase, with 80 pairs estimated in 2022.

Code	County	Topo Quad	Pairs
GBH-01	Davidson	Southmont	25 GBHE

### GBH-01 Colony Description

This Great Blue Heron colony was located on a small island, near the Route 8 bridge, at the mouth of Abbotts Creek. The island supports a mixed stand of loblolly pines and hardwoods. Nests were built in both pines and hardwoods. On 29 March 2022, 25 pairs of Great Blue Herons were counted laying and incubating. The island has become a significant roost site for Double-crested Cormorants in recent years.

### *Map location of Great Blue Heron colony GBH-01.*



**Aerial view of Great Blue Heron colony GBH-01 (Photo 2011; B. Watts).**



Code	County	Topo Quad	Pairs
GBH-02	Rowan	Southmont	120 GBHE, 80 GREG

**GBH-02 Colony Description**

This colony was located along the western edge of the Duke Power settling ponds just north of the intersection of Leonard Road and Long Ferry Road. The pond was bordered with a mixed stand of hardwoods and pines. A larger stand dominated by loblolly pines was positioned further from the pond edge. Nests were built along the pond margin in both the mixed stand of hardwoods and the pure pine stand. On 29 March 2022, 100 GBHE pairs and 60 GREG pairs were building, laying and incubating. On 2 June 2022, numbers had increased to 120 pairs of GBHE and 80 pairs GREG most with chicks.

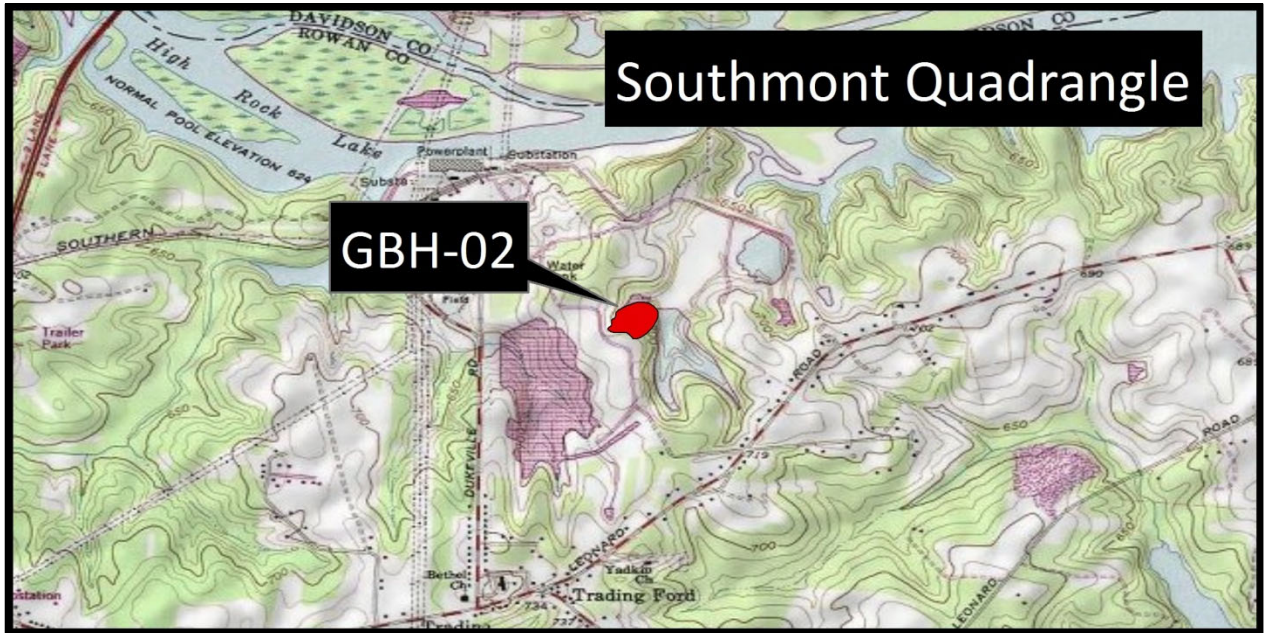
Code	County	Topo Quad	Pairs
GBH-03	Rowan	Southmont	4

**GBH-03 Colony Description**

This Great Blue Heron colony was located on a small, forested island in the mouth of Second Creek. The island is forested with a middle-aged loblolly pine stand. On 29 March 2022, 4 pairs of Great Blue Herons pairs were laying and incubating. This island is now used as a major Double-crested Cormorant roost.



**Map location of Great Blue Heron colony GBH-02.**



**Aerial view of the western portion of Great Blue Heron colony GBH-02 (Photo 2016; B Paxton).**



Code	County	Topo Quad	Pairs
GBH-06	Rowan	Southmont	45 GBHE

### **GBH-06 Colony Description**

This Great Blue Heron colony is located on a small forested island within Swearing Creek just above the Linwood Southmont Road Bridge. The island is forested with a middle-aged pine stand. On 29 March 2022, there were 45 nesting pairs present, building, laying and incubating. This island is increasingly being used as a Double-crested Cormorant roost.

Code	County	Topo Quad	Pairs
GBH-07	Rowan	Grist Mountain	5

### **GBH-07 Description**

This Great Blue Heron colony is located on a small forested island within Abbots Creek off shore of a small development at the end of Route 2373. The island was forested with a mix of pine and hardwood. On 29 March 2022, 5 pairs GBHE were nesting on the island. It appears that this island is now becoming a Double-crested Cormorant roost like many other islands on this reservoir.

Code	County	Topo Quad	Pairs
GBH-10	Davidson	Southmont	0 GBHE

### **GBH-10 Colony Description**

This Great Blue Heron colony was located on a small, forested peninsula that forms the southeastern mouth of Abbots Creek. The site is forested with a mix of pine and hardwood. On 29 March 2022, no GBHE were detected at this colony.

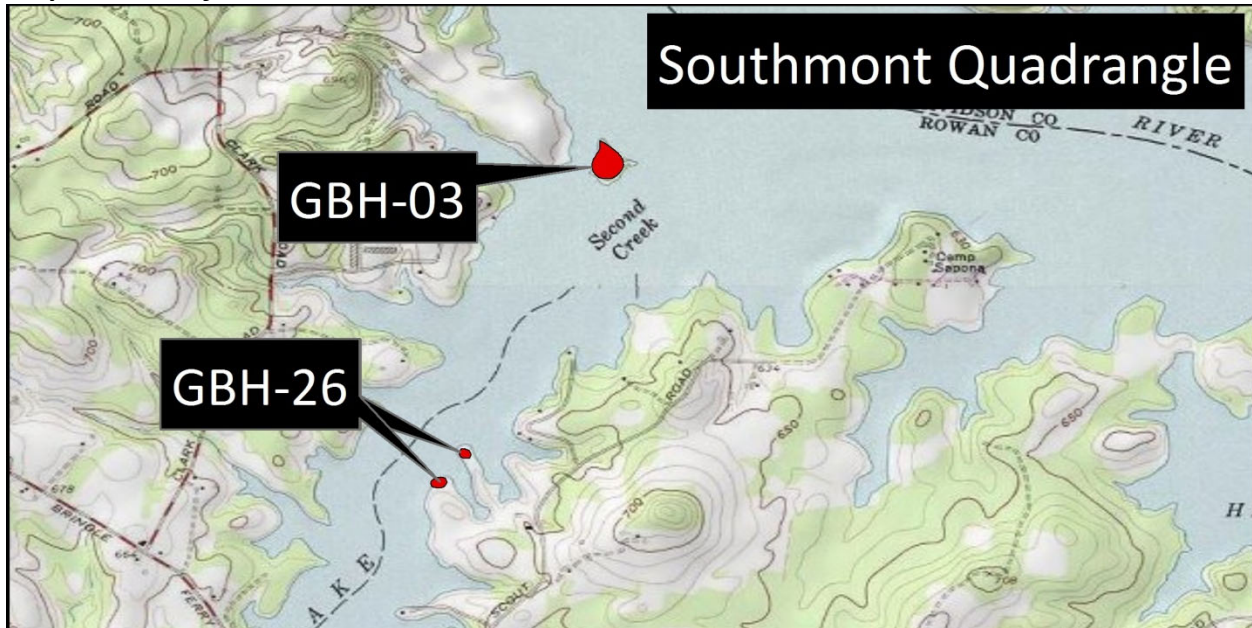
Code	County	Topo Quad	Pairs
GBH-11	Davidson	Grist Mountain	30 GBHE

### **GBH-11 Colony Description**

This Great Blue Heron colony was located on a small forested island in Abbots Creek. The site was forested with a mix of pine and hardwood. On 2 June 2022, there were 30 pairs nesting on the island with chicks in most nests.



**Map location of Great Blue Heron colonies GBH-03 and GBH-26.**

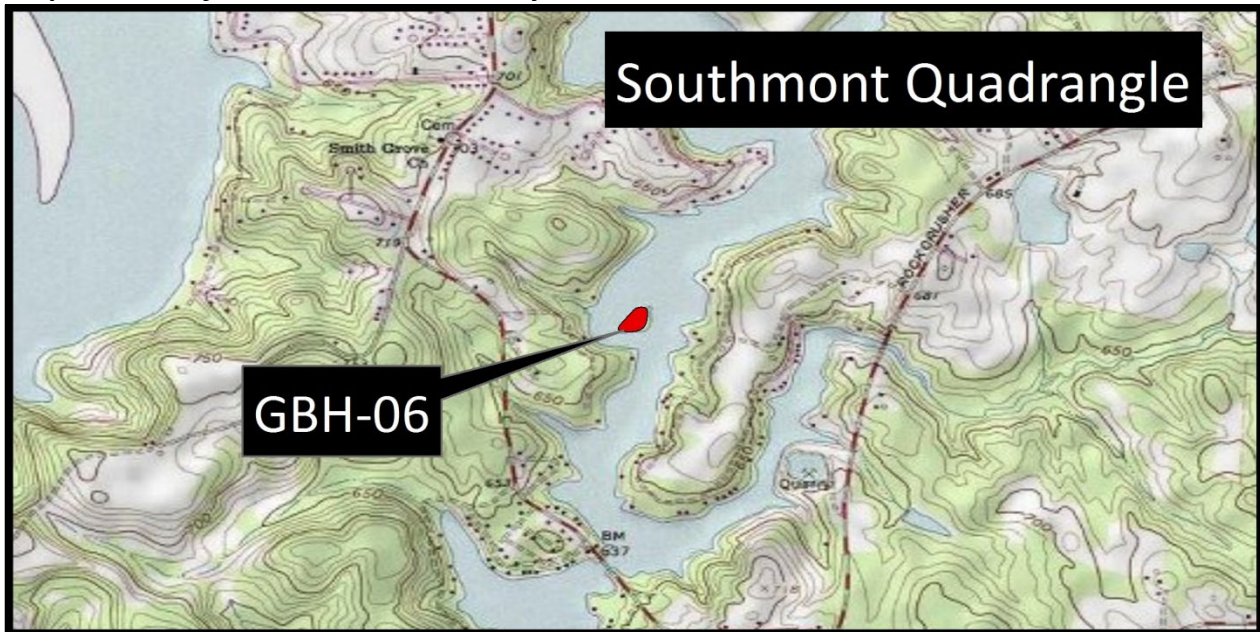


**Aerial view of Great Blue Heron colony GBH-03 (Photo 2006, B. Watts).**





**Map location of Great Blue Heron colony GBH-06.**

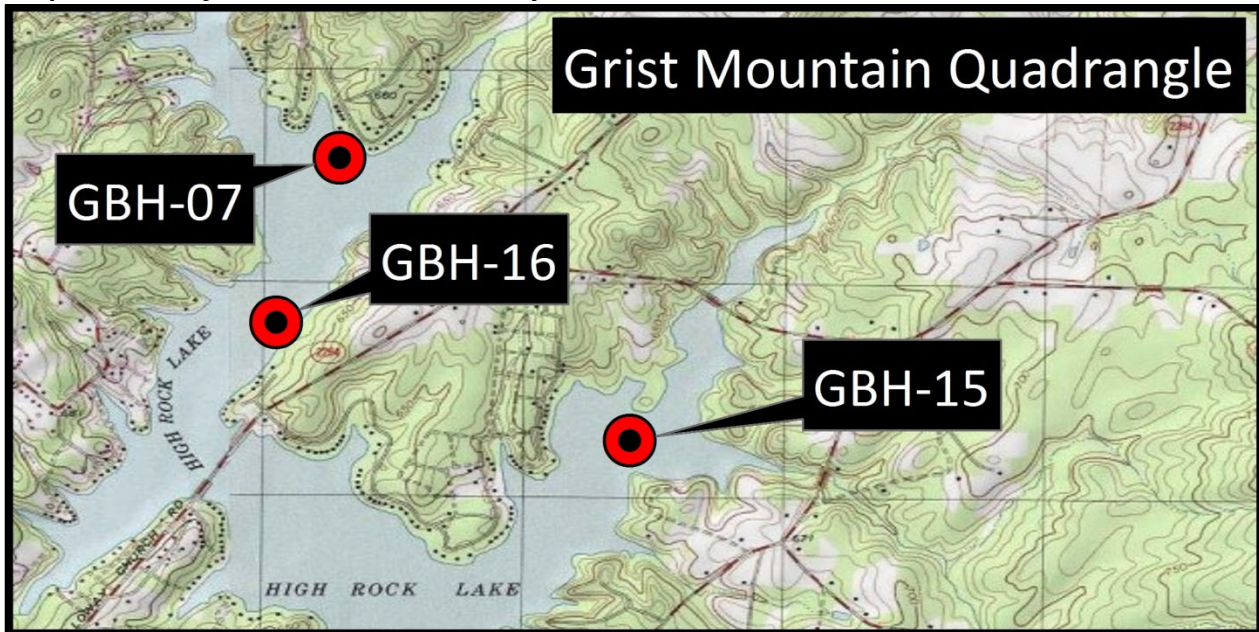


**Aerial view of Great Blue Heron colony GBH-06 (Photo 2011; B. Watts).**





*Map location of Great Blue Heron colony GBH-07.*



*Aerial view of Great Blue Heron colony GBH-07 (Photo 2013; B. Paxton).*







**Map location of Great Blue Heron colony GBH-11.**



**Aerial view of the southern portion of Great Blue Heron colony GBH-11 (Photo 2011; B. Watts).**



Code	County	Topo Quad	Pairs
GBH-15	Davidson	Grist Mountain	24

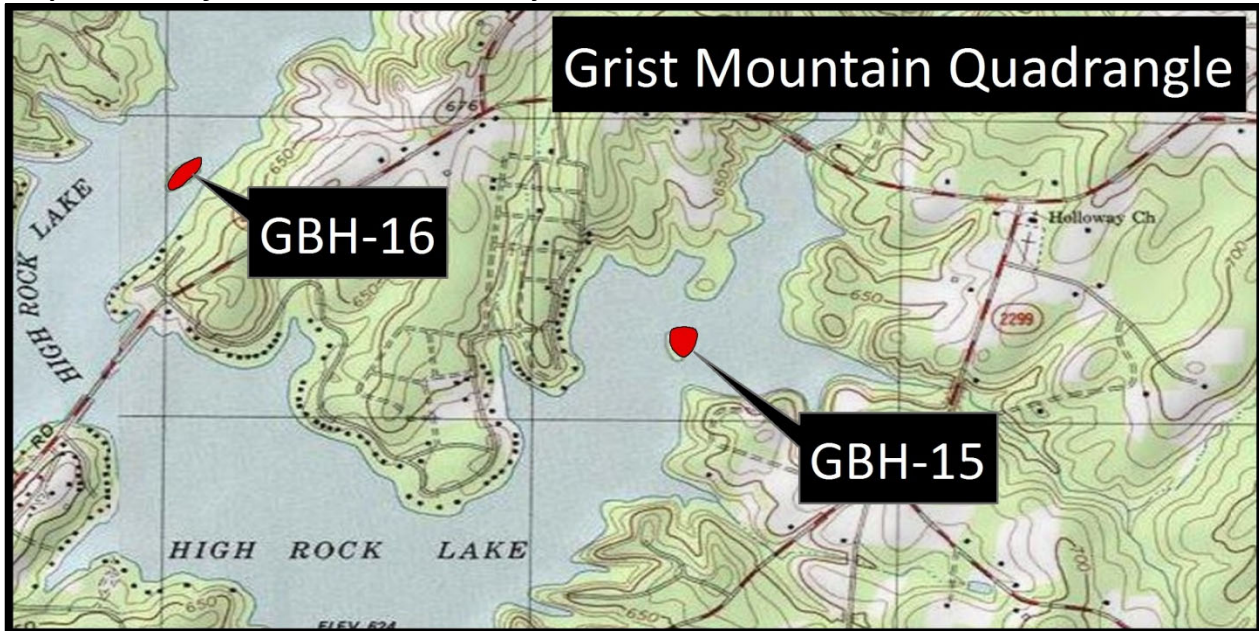
**GBH-15 Colony Description**

This Great Blue Heron colony is located on a small forested island in Abbotts Creek, southwest of Holloway Church. The site is forested with a mix of pine and hardwood. After being inactive



for 2 years, this colony was again found to be active in 2016. On 29 March 2022, 24 breeding pairs of GBHE were observed in the laying and incubation stage.

**Map location of Great Blue Heron colony GBH-15.**



**Aerial view of Great Blue Heron colony GBH-15 (Photo 2010; B. Watts).**

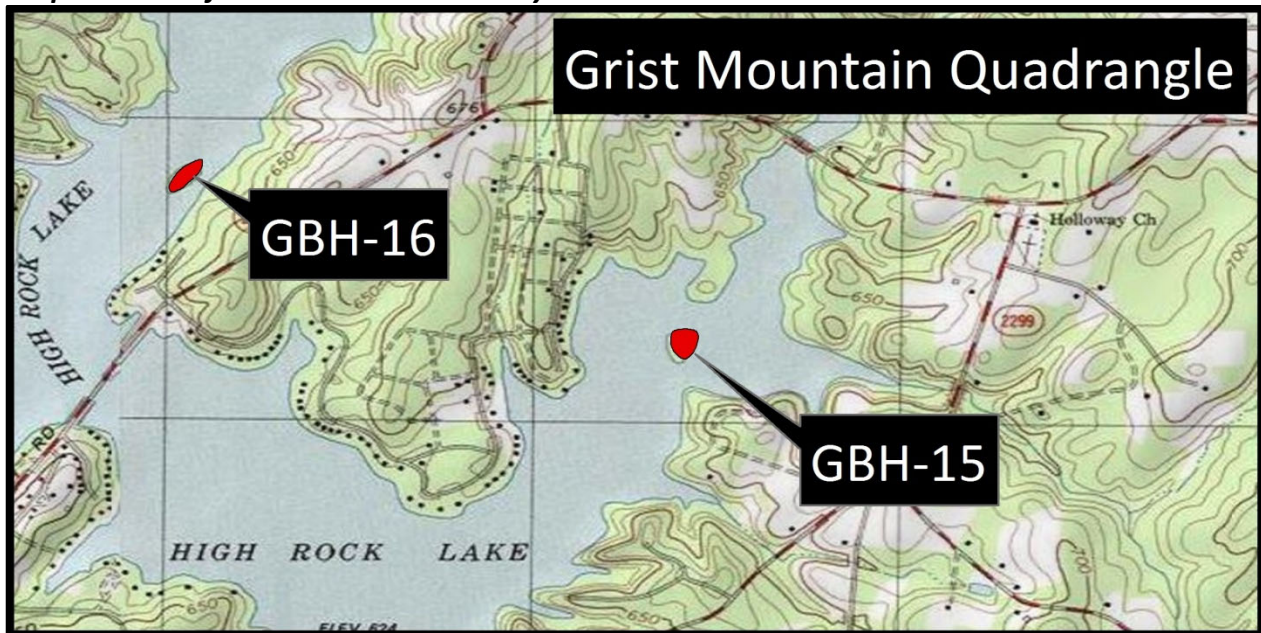


Code	County	Topo Quad	Pairs
GBH-16	Davidson	Grist Mountain	2 GBHE

**GBH-16 Colony Description**

This Great Blue Heron colony is located on a small forested island in Abbotts Creek. The site is forested with a mix of pine and hardwood. On 29 March 2022, there were 2 GBHE pairs nesting on the island, all of which were in the laying or incubation stage.

***Map location of Great Blue Heron colony GBH-16.***



***Aerial view of Great Blue Heron colony GBH-16 (Photo 2010; B. Watts).***



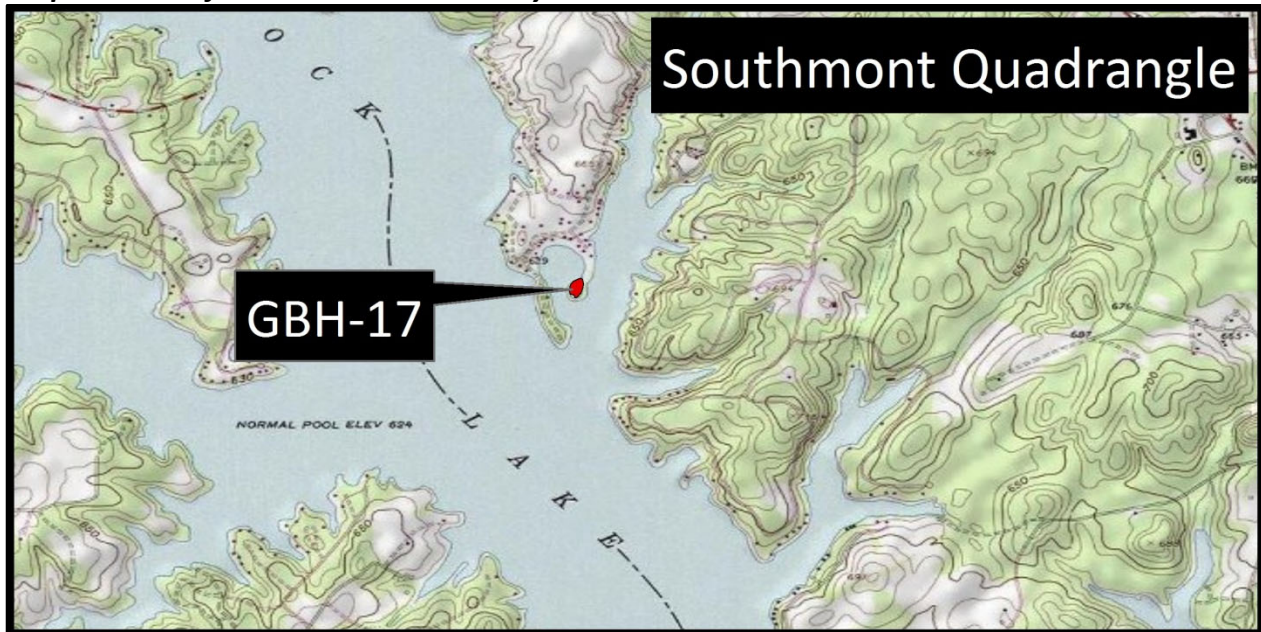


Code	County	Topo Quad	Pairs
GBH-17	Davidson	Southmont	1 GBHE

**GBH-17 Colony Description**

This Great Blue Heron colony was located in a patch of forested land along Abbotts Creek, south of Southmont. The patch of forest is comprised of middle-aged pines. On 29 March 2022, a single pair of GBHE was found be incubating at this colony.

***Map location of Great Blue Heron colony GBH-17.***



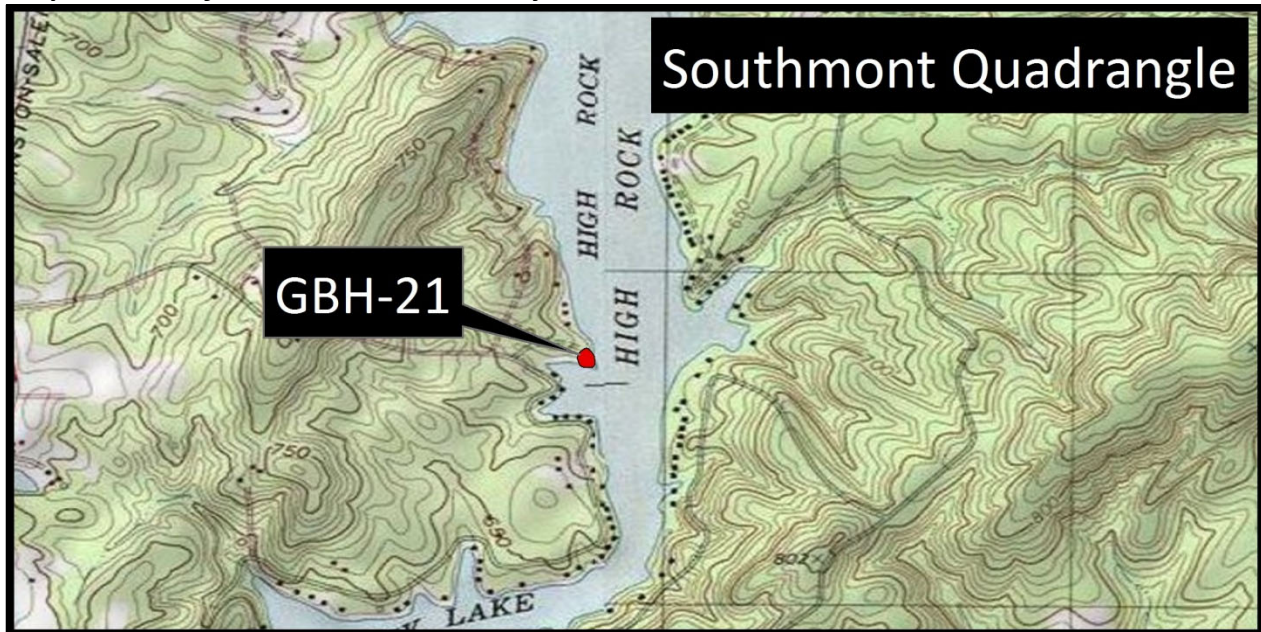
Code	County	Topo Quad	Pairs
GBH-21	Davidson	Southmont	3 GBHE

**GBH-21 Colony Description**

This Great Blue Heron colony is located in a patch of forested land along Abbotts Creek at the end of Fern Creek Drive, northeast of Feezor. The patch of forest is comprised of middle-aged pines. On 29 March 2022, 3 pairs of herons were observed laying and incubating.



**Map location of Great Blue Heron colony GBH-21.**



**Aerial view of Great Blue Heron colony GBH-21 (2012; B. Watts).**



Code	County	Topo Quad	Pairs
GBH-23	Davidson	Grist Mountain	2 GBHE

**GBH-23 Colony Description**

This Great Blue Heron colony is located in a patch of forested land along Flat Swamp Creek, northeast of High Rock. The patch of forest is comprised of middle-aged pines. On 29 March 2022, there were 2 nesting pairs present and incubating.

**Map location of Great Blue Heron colony GBH-23.**



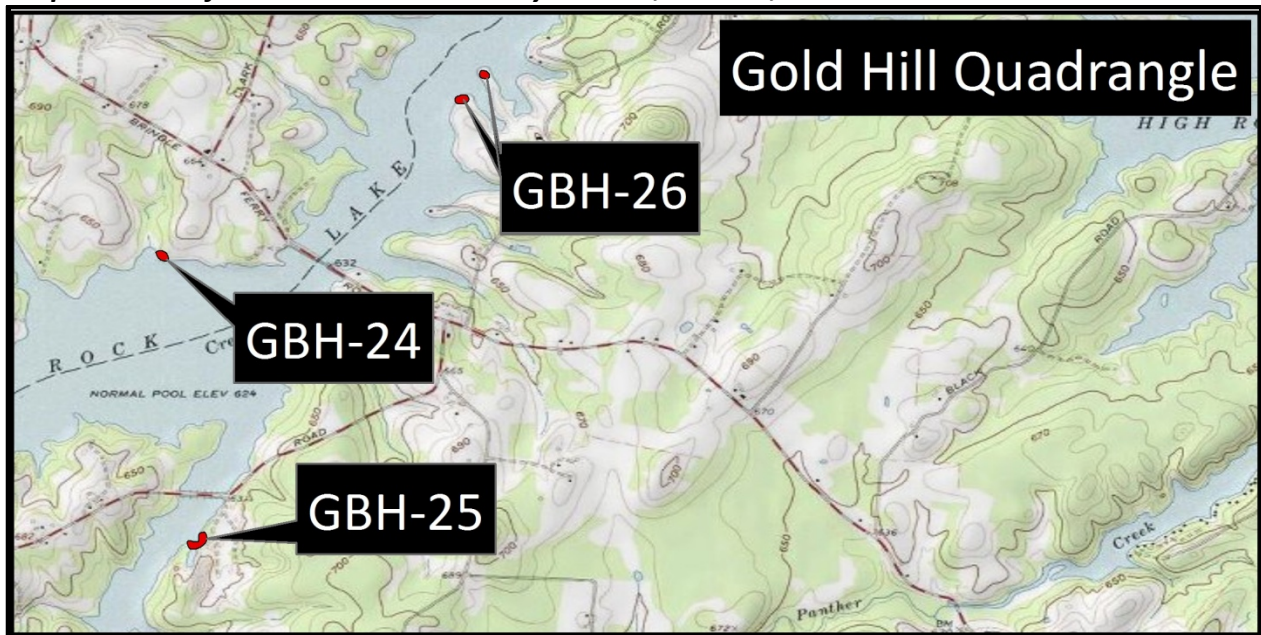
Code	County	Topo Quad	Pairs
GBH-24	Rowan	Gold Hill	0 GBHE
GBH-25	Rowan	Gold Hill	5 GBHE
GBH-26	Rowan	Gold Hill	0 GBHE

**GBH-24, GBH-25, and GBH-26 Colony Descriptions**

These Great Blue Heron colonies were located along the wooded edge of Second Creek. All three patches of forest are comprised of middle-aged pines. On both 29 March 2022, 5 pairs of GBHE were found laying and incubation in colony GBH-25. The other 2 colonies contained no birds.



**Map location of Great Blue Heron colony GBH-24, GBH-25, and GBH-26.**



Code	County	Topo Quad	Pairs
GBH-28	Davidson	Gold Hill	0 GBHE

**GBH-28 Colony Description**

This Great Blue Heron colony was located in a forested patch near the mouth of Branch Creek. The patch of forest is comprised of middle-aged pines. No active GBHE nests were observed at this colony in 2022. This colony has not been active for 8 years.

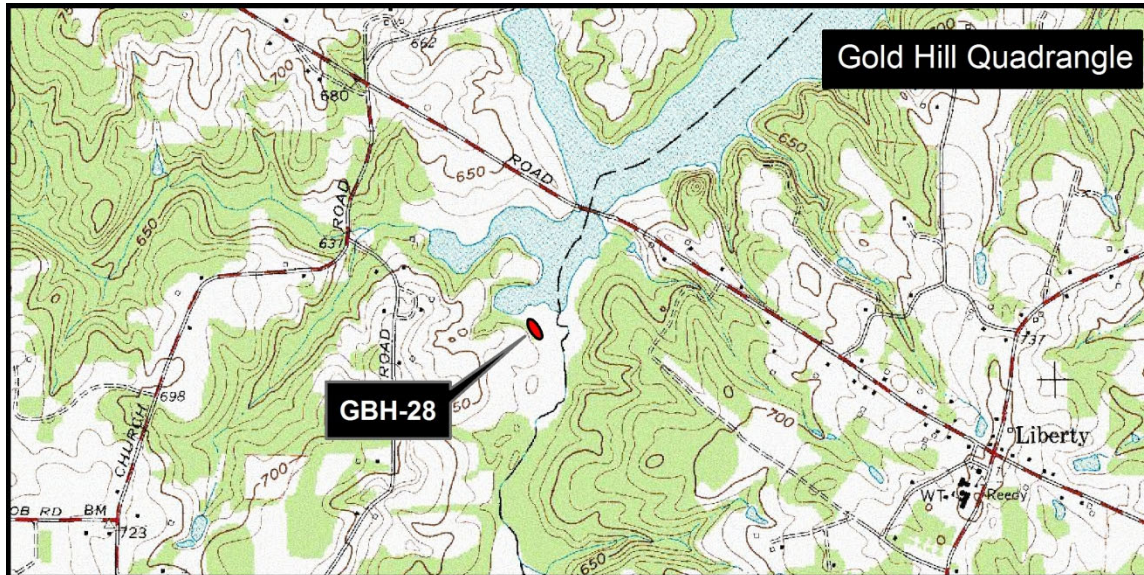
Code	County	Topo Quad	Pairs
GBH-30	Davidson	Gold Hill	30 GBHE

**GBH-30 Colony Description**

This Great Blue Heron colony, discovered in 2016, is located in a forested peninsula on the north shore of Flat Swamp Creek. The patch of forest on the peninsula is comprised of middle-aged pines. On 29 March 2022, this colony was found to have increased again, with 30 pairs of GBHE laying and incubating.



**Map location of Great Blue Heron colony GBH-28.**

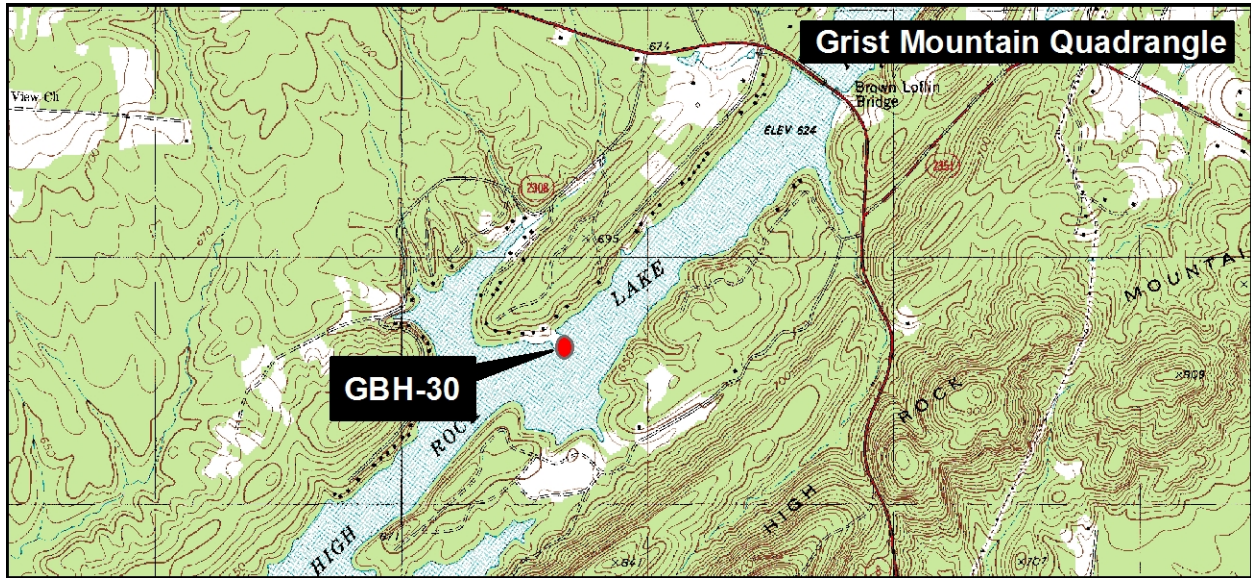


**Aerial view of Great Blue Heron colony GBH-28 (2014; B. Paxton).**





**Map location of Great Blue Heron colony GBH-30.**



**Aerial view of Great Blue Heron colony GBH-30 (2016; B. Paxton).**



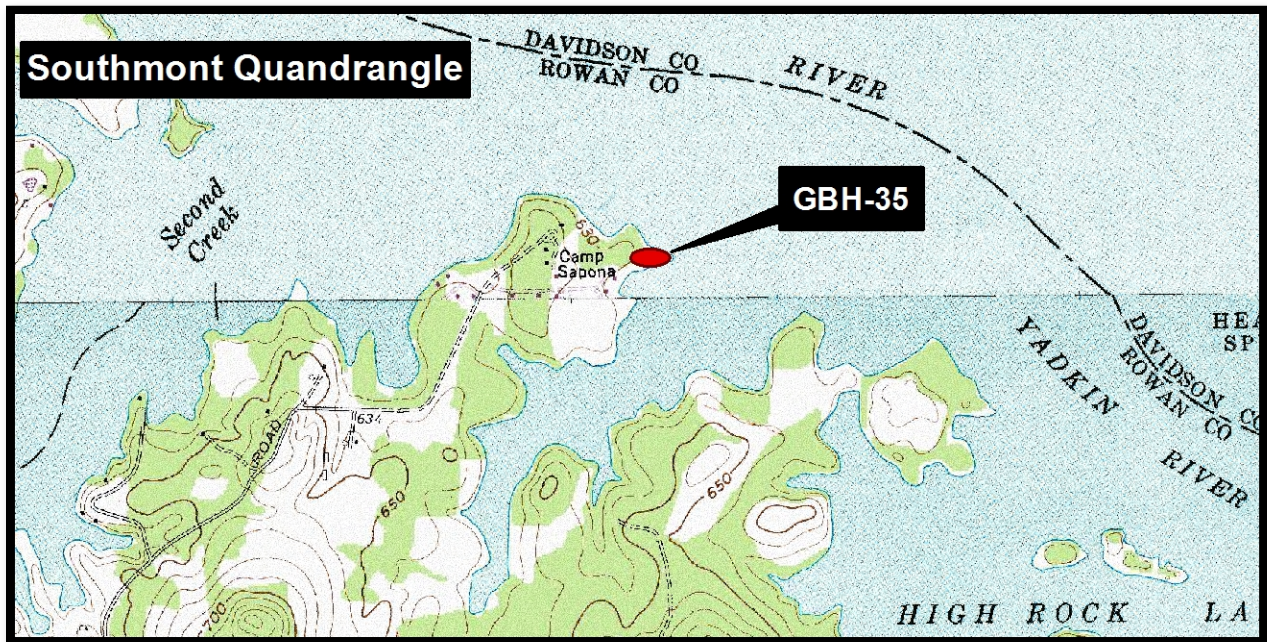


Code	County	Topo Quad	Pairs
GBH-35	Davidson	Gold Hill	1 GBHE

**GBH-35 Colony Description**

This Great Blue Heron colony was located on a forested tip of peninsula on the eastern side of the mouth of Second Creek. The forest on the tip of this peninsula is comprised of tall medium aged pines. On 2 June 2022, a single pair of GBHE was observed with small chicks.

***Map location of Great Blue Heron colony GBH-35.***



***Aerial view of Great Blue Heron colony GBH-35 (2018; B. Paxton).***





<b>Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Pairs</b>
GBH-36	Davidson	Grist Mountain	0 GBHE

**GBH-36 Colony Description**

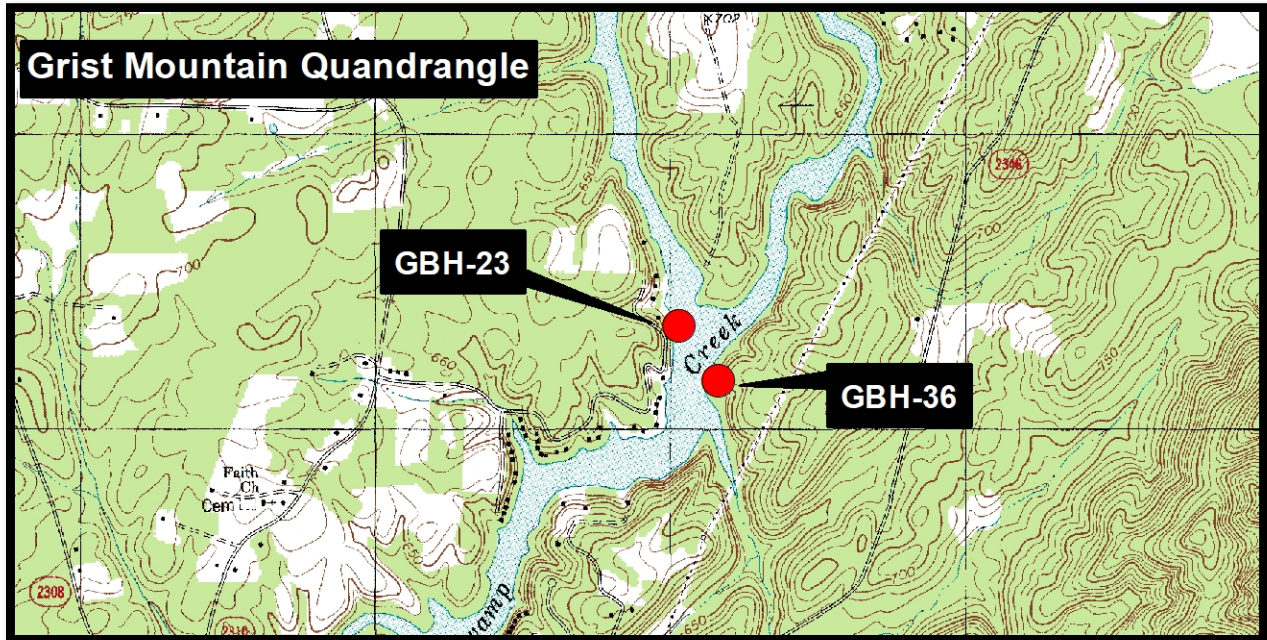
This Great Blue Heron colony was located on a forested tip of the eastern shoreline of Flat Swamp Creek. The forest on the tip of this peninsula is comprised of tall, medium aged pines. No active GBHE nests were observed at this colony in 2022. This colony was only active in 2019, the year it was discovered.

<b>Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Pairs</b>
GBH-37	Davidson	Grist Mountain	35 GBHE

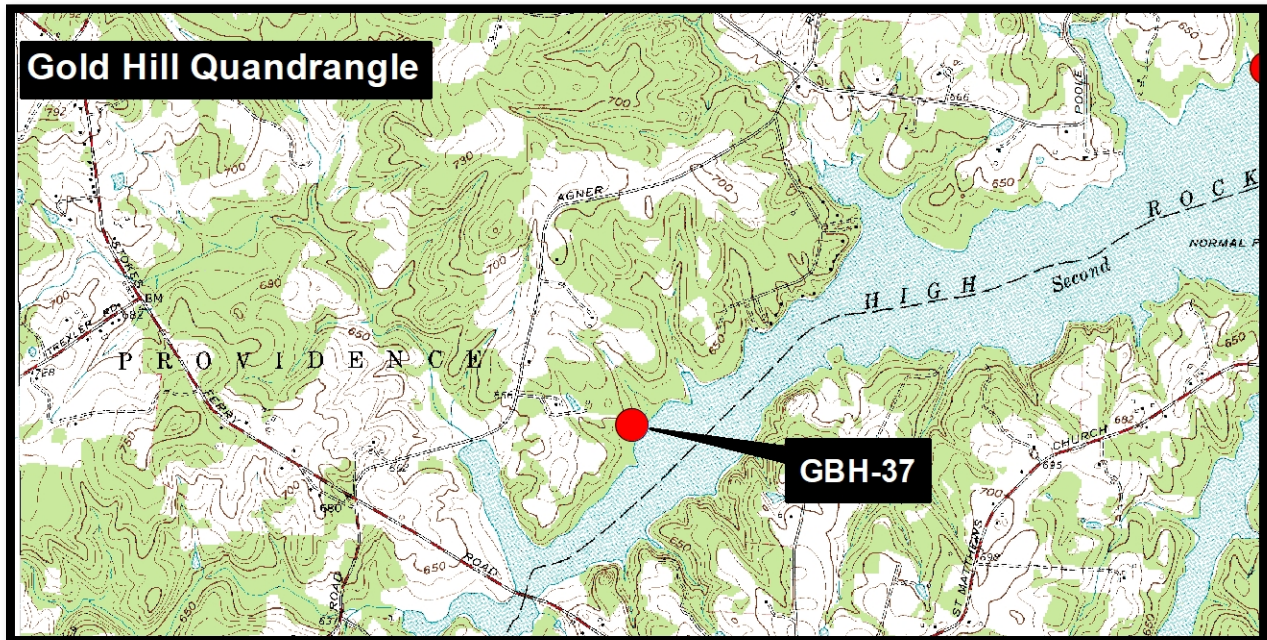
**GBH-37 Colony Description**

This Great Blue Heron colony is located on the north shore of Second Creek within a buffer of older pines adjacent to a regenerating clearcut. On 29 March 2022, there were 35 nesting pairs present, all were laying and incubating.

Map location of Great Blue Heron colony GBH-36.



Map location of Great Blue Heron colony GBH-37.





**Aerial view of Great Blue Heron colony GBH-37 (2019; B. Paxton).**



Code	County	Topo Quad	Pairs
GBH-40	Rowan	Gold Hill	25 GBHE

**GBH-40 Colony Description**

This Great Blue Heron colony is located on the west shore of Second Creek, north of the Bringle Ferry Road Bridge. The colony is located in a small patch of pines on a narrow point. On 29 March 2022, this colony again had 25 nesting pairs.

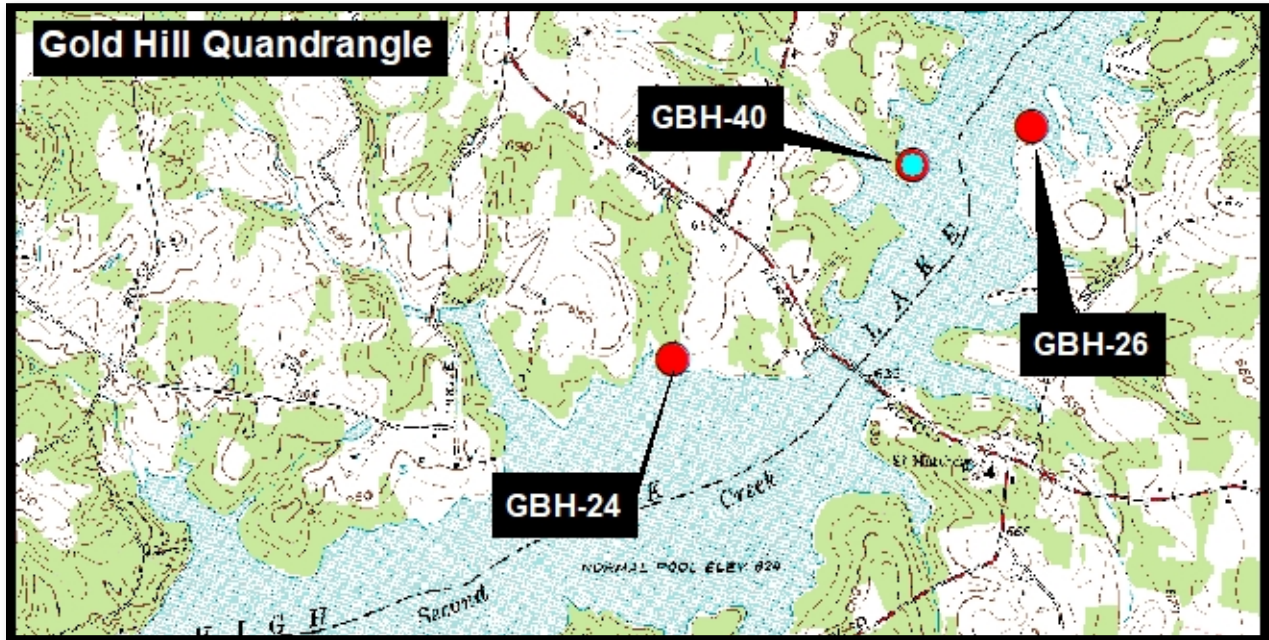
Code	County	Topo Quad	Pairs
GBH-42	Davidson	Grist Mountain	0 GBHE

**GBH-42 Colony Description**

This new Great Blue Heron colony, located in 2020, was located approximately 100m south of GBH-23 in the same patch of forested land along Flat Swamp Creek, northeast of High Rock. The patch of forest is comprised of middle-aged pines. No active GBHE nests were observed at this colony in 2022.



**Map location of Great Blue Heron colony GBH-40.**

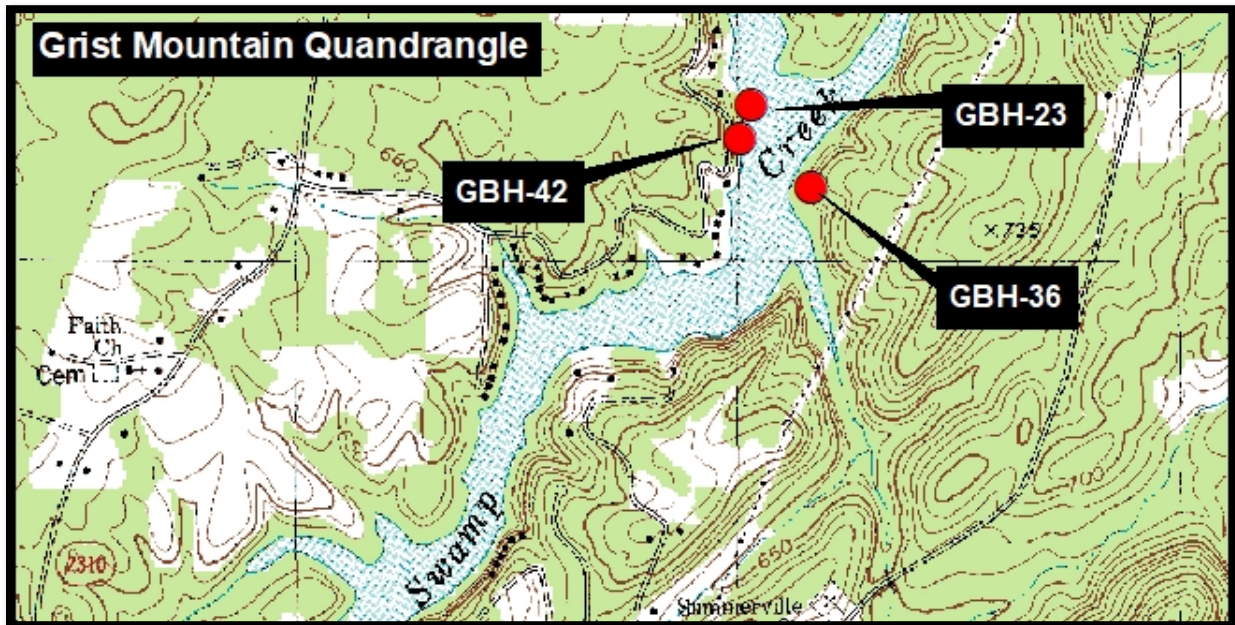


**Aerial view of Great Blue Heron colony GBH-40 (2020; B. Paxton).**





**Map location of Great Blue Heron colony GBH-42.**



**Aerial view of Great Blue Heron colony GBH-42 (2020; B. Paxton).**





Code	County	Topo Quad	Pairs
GBH-43	Rowan	Southmont	3 GBHE

### **GBH-43 Colony Description**

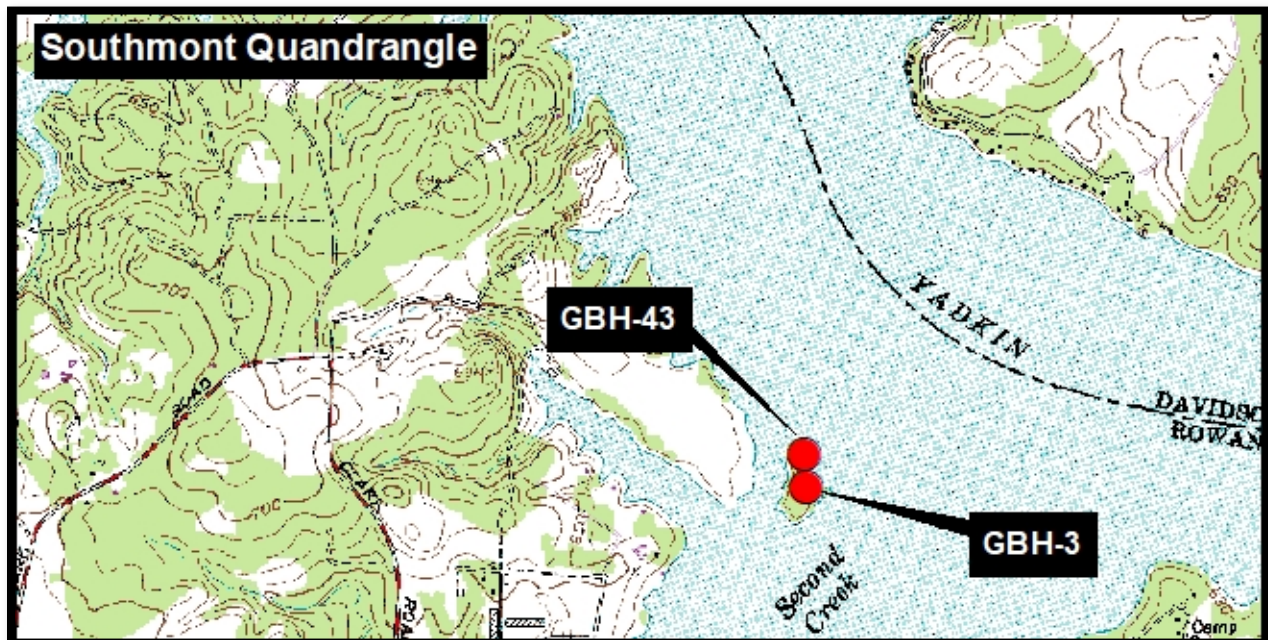
This Great Blue Heron colony discovered in 2021 is located on the same small, forested island in the mouth of Second Creek as GBH-3. The island is forested with a middle-aged loblolly pine stand. On 29 March 2022, 3 GBHE pairs were laying and incubating. This newer colony is approximately 120m north of GBH-3 on the northern tip of the island.

Code	County	Topo Quad	Pairs
GBH-44	Davidson	Grist Mill	0 GBHE

### **GBH-44 Colony Description**

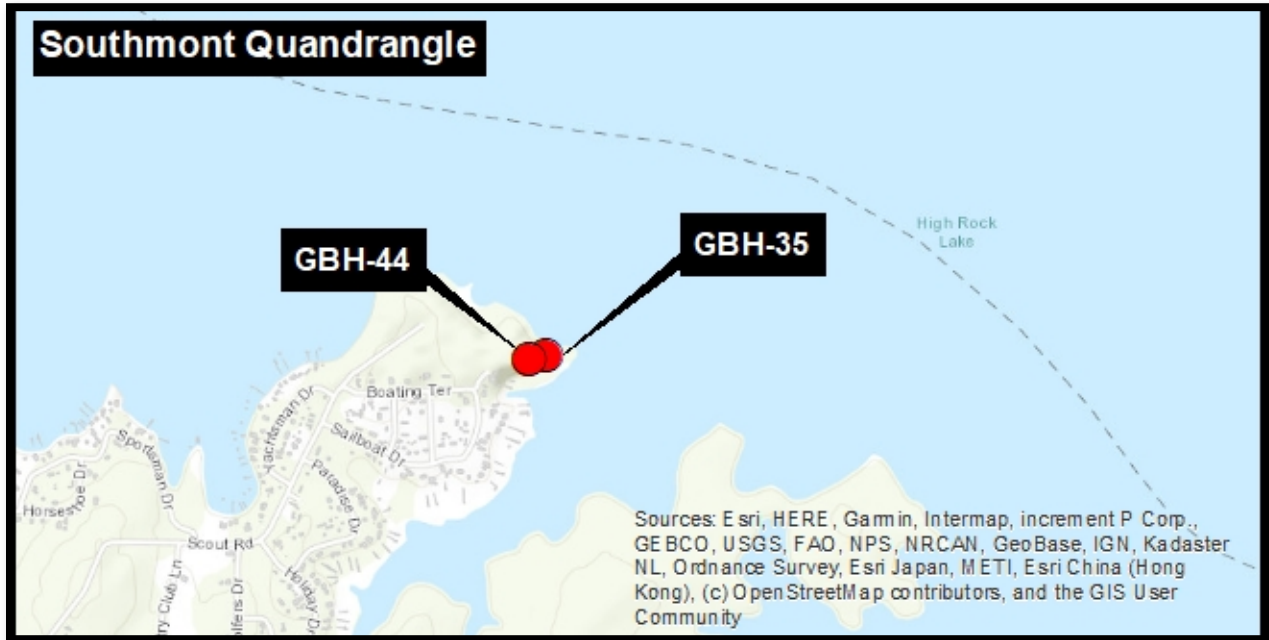
This Great Blue Heron on the same forested tip of peninsula on the eastern side of the mouth of Second Creek as GBH-35. The forest on the tip of this peninsula is comprised of tall medium aged pines. This small colony formed in 2020, approximately 50m west of GBH-35. GBH-44 and GBH-35 could be considered a single colony. No pairs of herons were observed here in 2022. Combined, colonies GBH-44 and GBH-35 supported a single pair of Great Blue Herons.

### ***Map location of Great Blue Heron colony GBH-43.***





**Map location of Great Blue Heron colony GBH-44.**



**Aerial view of Great Blue Heron colony GBH-44 (2020; B. Paxton).**



## Tuckertown Reservoir

### Bald Eagles

There were 4 occupied and active Bald Eagle territories within the Tuckertown Reservoir system. Nests DA-19-03, DA-20-03, and RO-17-01 produced 2 chicks each. Nest RO-21-01, discovered in 2021, was active with 2 eggs observed on the first flight. However, during the productivity flight, the eggs were absent and no evidence of these eggs ever hatching was observed.

Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
DA-10-01	Davidson	High Rock	Y	N	N/A

### Nest Location

This now absent nest was located along the east shoreline between Lick and Cabin Creeks. The nest tree is within a buffer strip of loblolly pines between a regenerating pine stand and the water. The nest was likely visible from the water and from the railroad.

### Nesting Activity

*Bird Activity* – No bird activity was observed at this now absent nest.

*Nest Condition* – On 30 March 2021, the nest which was a remnant in 2020 was found to be absent. A new nest, DA-19-03, was built approximately 70m east in 2019.

### Nest Substrate

*Substrate Type* – Nest was built in a loblolly pine. Nest tree was on the landward edge of a pine buffer between a regenerating pine stand and the water.

*Nest Position* – Nest was positioned on side limbs up against the main trunk and down below the crown. Nest had greater than 50% sky exposure.

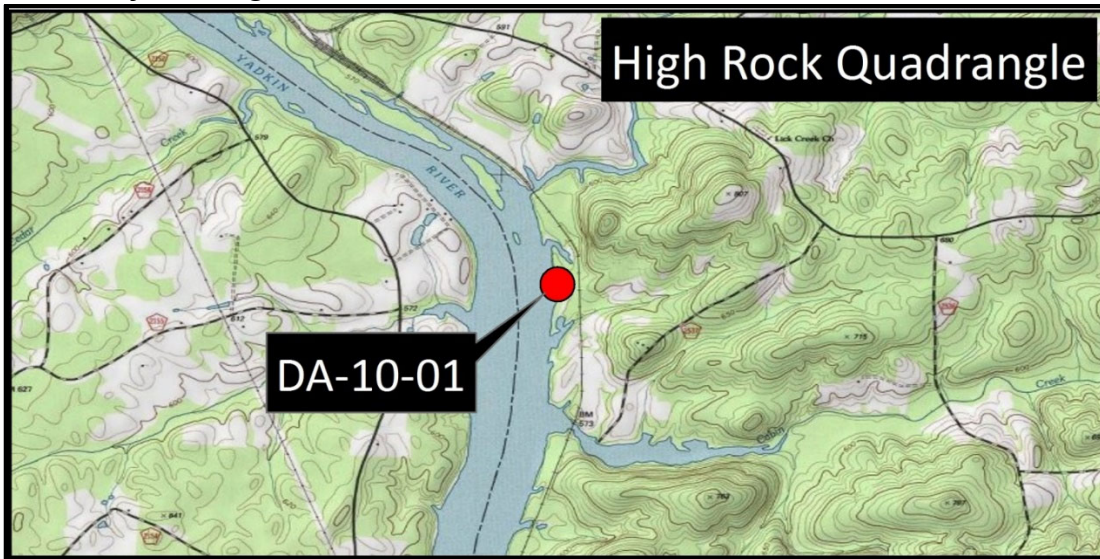
*Substrate Condition* – Nest tree appeared to be in good condition with no evidence of crown damage.

### Potential Disturbance

The nest may be visible from the water and the railroad, and would be most accessible from the waterside. The nest is not near any easy road access, disturbance potential appears limited.



**Map location of Bald Eagle nest DA-10-01.**



**Aerial photo of nest DA-10-01 (photo 2016; B. Paxton).**



<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
DA-19-03	Davidson	High Rock	Y	Y	2

**Nest Location**

This nest is located along the east shoreline, on the edge of a small cove, between Lick and Cabin Creeks. The nest tree is within a buffer strip of loblolly pines between a regenerating pine stand and the water. This nest is located approximately 70m east of the now remnant DA-10-01. The nest is likely visible from the water and from the railroad.

**Nesting Activity**

*Bird Activity* – On 29 March 2022, an adult was observed feeding 3 small chicks approximately 2 weeks old. On 2 June 2022, 2 chicks approximately 12 weeks old were observed in the branches of the nest tree. The third chick could not be located and could have been nearby. However, given the early age during the first flight, that chick may have not survived. I used a productivity value of 2 for this nest in 2022.

*Nest Condition* – On both 29 March and 2 June 2022, the nest was observed to be in good condition.

**Nest Substrate**

*Substrate Type* – Nest was built in a tall loblolly pine. Nest tree was on the northeast shore of a small cove within a narrow strip of mature trees.

*Nest Position* – Nest is positioned within the crotch of limbs near the top of the tree. Very good view into the nest from the north. Nest had greater than 50% sky exposure.

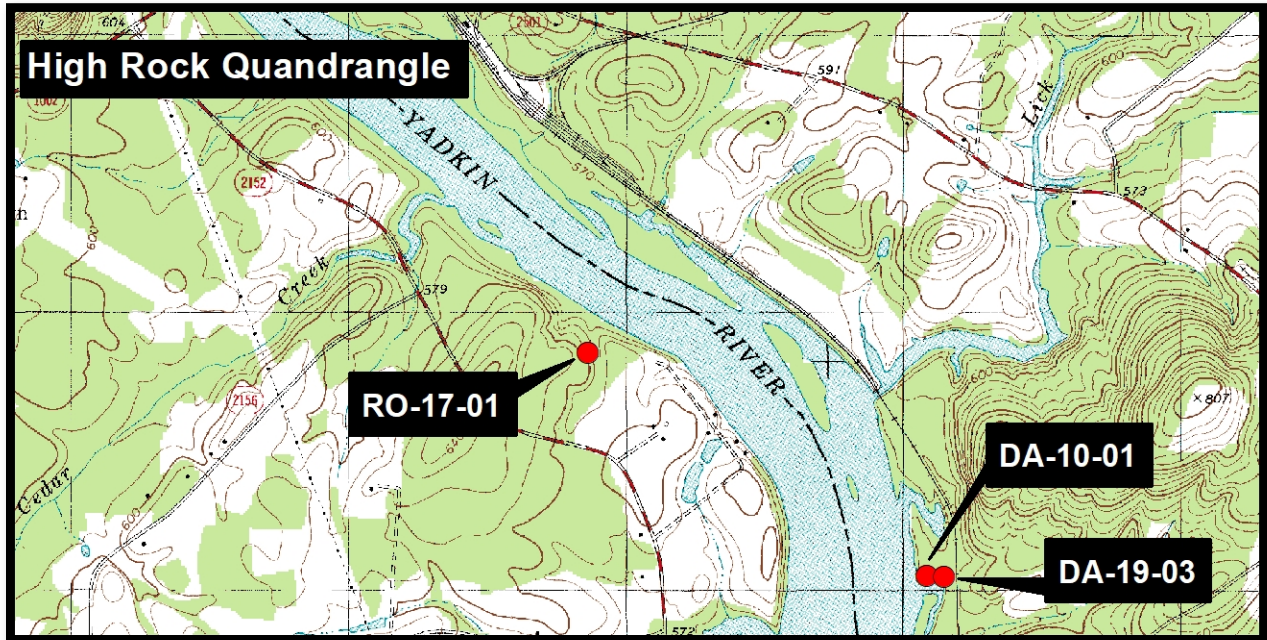
*Substrate Condition* – Nest tree appeared to be in good condition.

**Potential Disturbance**

The nest may be visible from the water and is definitely visible from the railroad. Easiest access would be from the water side. The upland side is not near easy road access, disturbance potential appears limited.



**Map location of Bald Eagle nest DA-19-03.**



**Aerial photo of nest DA-19-03 (photo 2019; B. Paxton).**



Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
DA-17-03	Davidson	High Rock	Y	N	N/A

**Nest Location**

This nest now absent nest was located along the east shoreline of Tuckertown Reservoir, downstream from the mouth of Cabin Creek. The nest tree is within a buffer strip of loblolly pines between railroad tracks and the water. The nest was likely visible from the water and from the railroad. The pair that occupied this nest is likely now using the new nearby nest DA-20-03.

**Nesting Activity**

*Bird Activity* – No bird activity was observed at this nest in 2022.

*Nest Condition* – – On 29 March 2022, the nest was found to be absent.

**Nest Substrate**

*Substrate Type* – Nest was built in a loblolly pine. Nest tree was in a narrow pine buffer between the railroad tracks and the water.

*Nest Position* – Nest was positioned on side limbs up against the main trunk and down below the crown. Nest had greater than 50% sky exposure.

*Substrate Condition* – Nest tree appeared to be in good condition with no evidence of crown damage.

**Potential Disturbance**

The nest was likely visible from the water and the railroad tracks, and would be most accessible from the water side. The land is not near easy road access, disturbance potential appears limited.

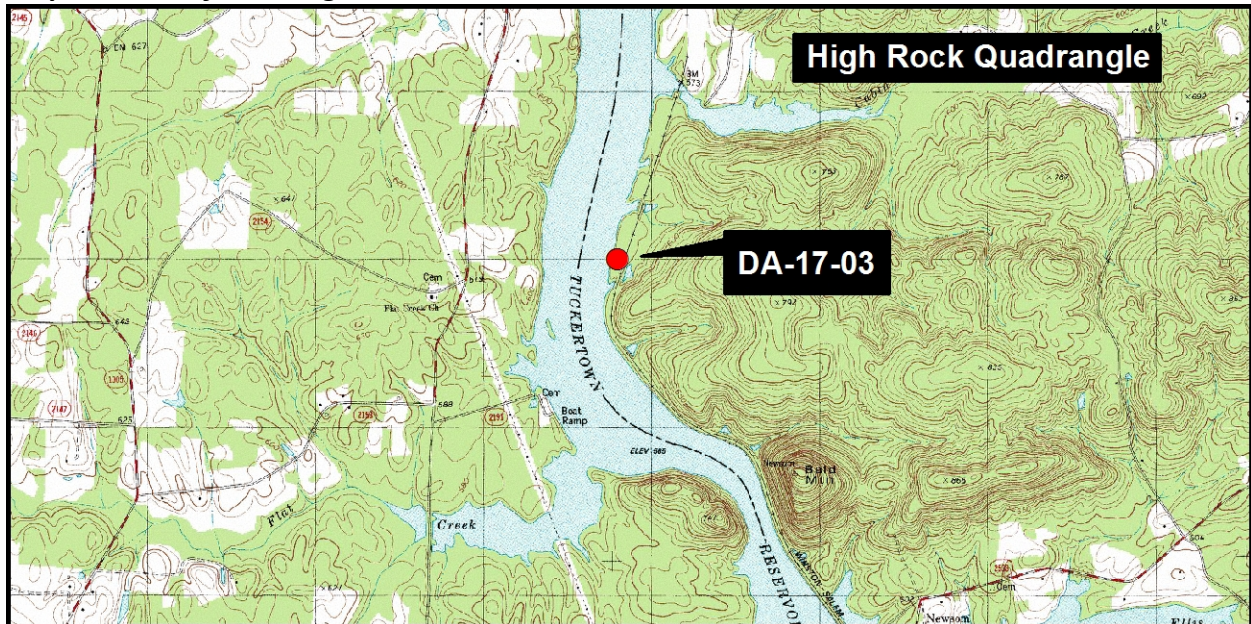
Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
RO-17-01	Rowan	High Rock	Y	Y	2

**Nest Location**

This nest is located along the southwest shoreline of Tuckertown Reservoir, between the mouth of Cedar Creek and Splendor View Road. The nest tree is within a thinned block of loblolly pines



**Map location of Bald Eagle nest DA-17-03.**



**Aerial photo of nest DA-17-03 (photo 2017; B. Paxton).**



between River Road and the reservoir. The nest is not likely visible from the water or from the road.

### **Nesting Activity**

*Bird Activity* – On 29 March 2022, 2 chicks approximately 6 weeks old were observed in the nest. On 2 June 2022, these chicks had fledged!



*Nest Condition* – The nest was in good structural condition.

**Nest Substrate**

*Substrate Type* – Nest was built in a loblolly pine. The nest tree is within a thinned block of loblolly pines between River Road and the reservoir.

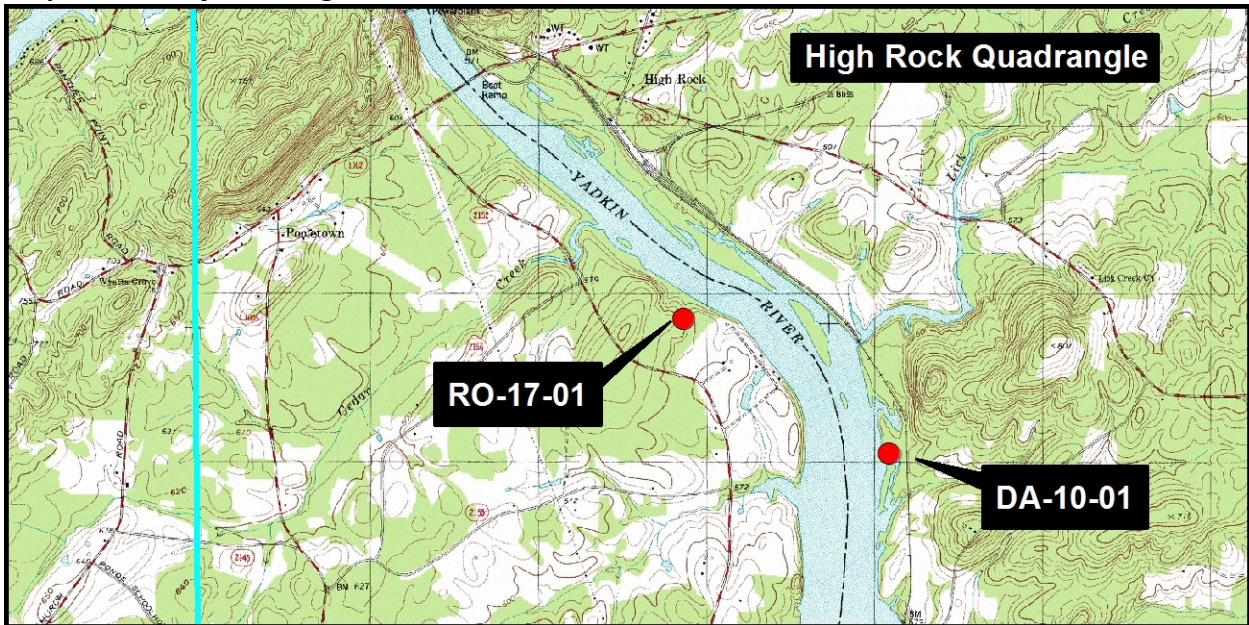
*Nest Position* – Nest was positioned on side limbs up against the main trunk and down below the crown. Nest had greater than 50% sky exposure.

*Substrate Condition* – Nest tree appeared to be in good condition with no evidence of crown damage.

**Potential Disturbance**

The nest is not likely visible from the water or roads, disturbance potential appears minimal.

***Map location of Bald Eagle nest RO-17-01.***





**Aerial photo of nest RO-17-01 (photo 2017; B. Paxton).**



Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
DA-20-03	Davidson	High Rock	Y	Y	2

**Nest Location**

This nest is located along the east shoreline of Tuckertown Reservoir, downstream from the mouth of Cabin Creek. The nest tree is on the north shore of a small inlet and just east of a railroad bridge. The nest is likely visible from the water and from the railroad. The pair that occupies this nest is likely the pair that was using the now damaged nest DA-17-03.

**Nesting Activity**

*Bird Activity* – On 29 March 2022, an adult was observed feeding very small chicks. On 2 June 2022, 2 chicks approximately 11 weeks old were observed standing around the nest.

*Nest Condition* – The damage found in 2020 had been repaired and this nest was observed to be in good structural condition.

**Nest Substrate**

*Substrate Type* – Nest was built in a loblolly pine. Nest tree was in a narrow pine buffer between a small inlet and a regenerating clearcut.

*Nest Position* – Nest was positioned on side limbs up against the main trunk and down below the crown. Nest had greater than 50% sky exposure. Visibility into the nest is good.

*Substrate Condition* – Nest tree appeared to be in good condition with no evidence of crown damage.

**Potential Disturbance**

The nest is likely visible from the water and the railroad tracks, and would be most accessible from the water. Disturbance potential appears limited.

<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
RO-21-01	Rowan	High Rock	Y	Y	0

**Nest Location**

This nest, discovered in 2021, is located on the southwestern shore of the Yadkin River, approximately 1 Km downstream of the High Rock Dam. The nest is located in a large pine tree at the northeastern corner of a recent clearcut.

**Nesting Activity**

*Bird Activity* – On 29 March 2022, this nest was observed to contain 2 eggs. No adults were observed in the immediate area. During the productivity flight on 2 June 2022, the eggs were absent and no evidence of these eggs ever hatching was observed.

*Nest Condition* – The nest appeared to be in good condition.

**Nest Substrate**

*Substrate Type* – Nest was built in a large loblolly pine at the northeastern corner of a recent clearcut approximately 75m southwest of the shoreline.

*Nest Position* – Nest was positioned on side limbs up against the main trunk and well below the crown. The nest was positioned on the southeastern side of the tree with good exposure. Visibility into the nest is good from the southeast.

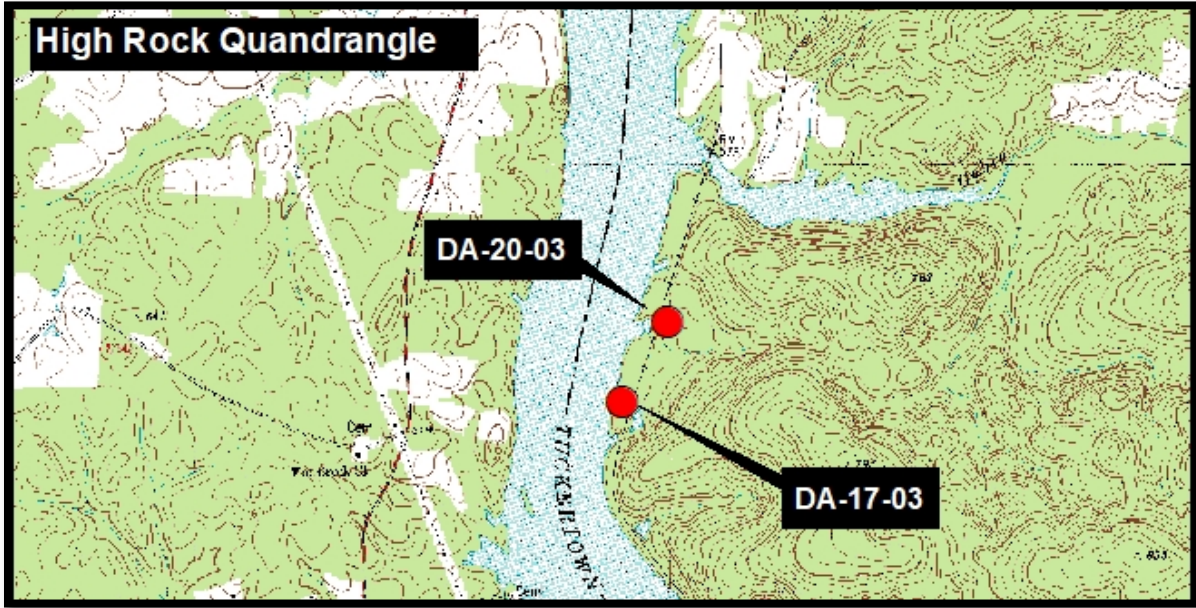
*Substrate Condition* – Nest tree appeared to be in good condition with no evidence of crown damage.



**Potential Disturbance**

The nest is not likely easily visible from the water. There does appear to be a vehicle trail along the southeastern side of the clearcut, leading near the nest location. Disturbance potential appears limited.

***Map location of Bald Eagle nest DA-20-03.***

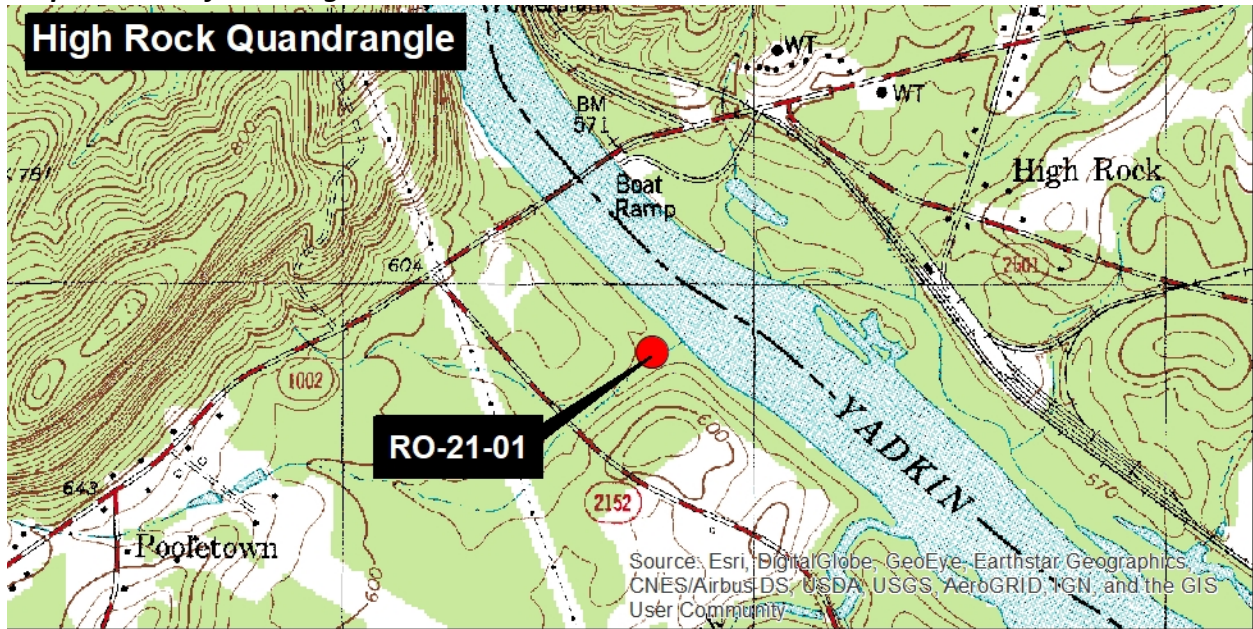


***Aerial photo of nest DA-20-03 (photo 2020; B. Paxton).***





**Map location of Bald Eagle nest RO-21-01.**



**Aerial photo of nest RO-21-01 (photo 2021; B. Paxton).**





## Great Blue Herons/Great Egrets

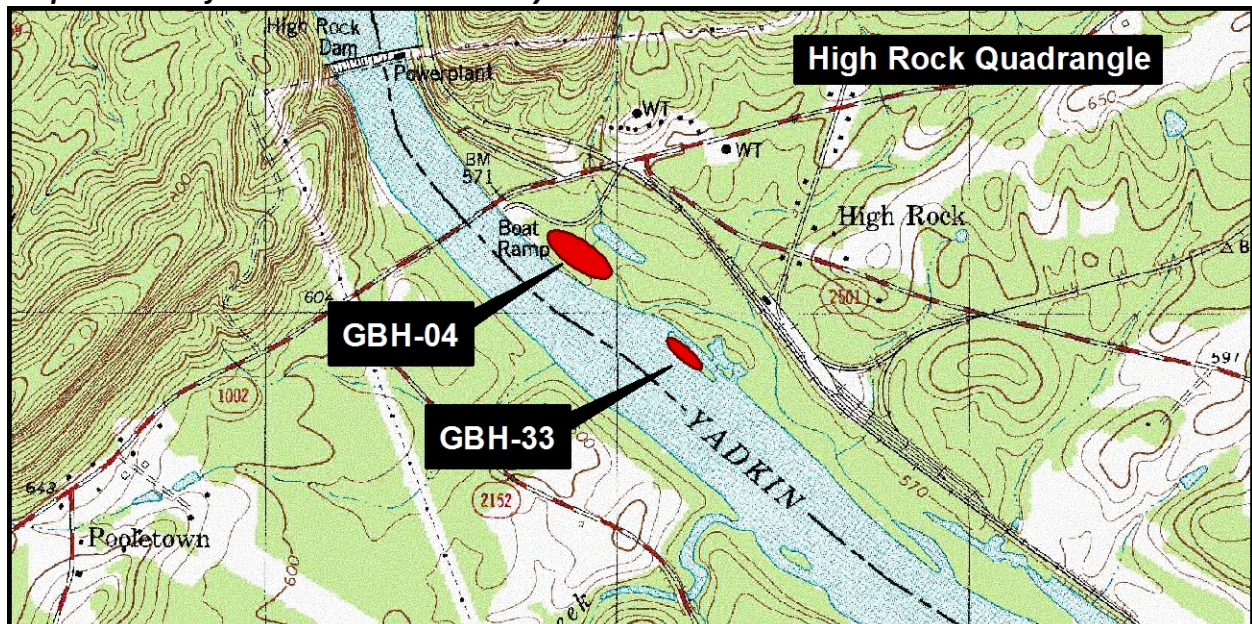
Five colonies of breeding Great Blue Herons were detected on Tuckertown Reservoir during the 2022 surveys. 2 of these colonies were previously known and 3 are new small colonies discovered during flights in 2022. GBH-33, located immediately downstream from GBH-04 was found to be active but declining from 20 of GBHE in 2021 to 10 pairs in 2022. GBH-4 continues to support a significant number of GBHE, increasing to 100 pairs in 2022, but the pairs of Great Egrets that once bred at this colony were absent in 2022..

Code	County	Topo Quad	Pairs
GBH-04	Davidson	High Rock	100 GBHE

### GBH-04 Colony Description

This once mixed Great Blue Heron and Great Egret colony is located on a small, forested island and the adjacent forested shoreline just below the High Rock Dam. This island is long and linear, and contains a mixed stand of hardwoods and pines. The adjacent shoreline is pine-dominated. On 29 March 2022, 100 pairs of GBHE were observed building, laying and incubating. On 2 June 2022, it appeared that the number of GBHE nests had dropped to approximately 80 and no GREG were observed using the colony.

### Map location of Great Blue Heron colony GBH-04 and GBH-33.





**Aerial view of Great Blue Heron colony GBH-04 (photo 2011, B. Watts).**



Code	County	Topo Quad	Pairs
GBH-33	Davidson	High Rock	10 GBHE

**GBH-33 Colony Description**

This Great Blue Heron colony is located on a small forested island directly downstream from GBH-04. This island is long and linear, and consists mainly of pines. The adjacent shoreline is mixed pine and hardwoods. On 29 March 2022, 10 pairs of GBHE were present building, laying and incubating.

Code	County	Topo Quad	Pairs
GBH-45	Davidson	High Rock	8 GBHE

**GBH-45 Colony Description**

This new Great Blue Heron colony is located on a thin forested peninsula at the mouth of a cove on the west shoreline of the reservoir, approximately 250 meters north of the Flat Creek boat ramp. Heron nests are located in mature pines at the tip of the peninsula. On 29 March 2022, 8 pairs of GBHE were present laying and incubating.



Code	County	Topo Quad	Pairs
GBH-46	Davidson	High Rock	4 GBHE

**GBH-46 Colony Description**

This new Great Blue Heron colony is located on narrow, hardwood forested island at the mouth of Riles Creek on the west side of the reservoir. On 29 March 2022, 4 pairs of GBHE were present laying and incubating.

Code	County	Topo Quad	Pairs
GBH-47	Davidson	High Rock	3 GBHE

**GBH-47 Colony Description**

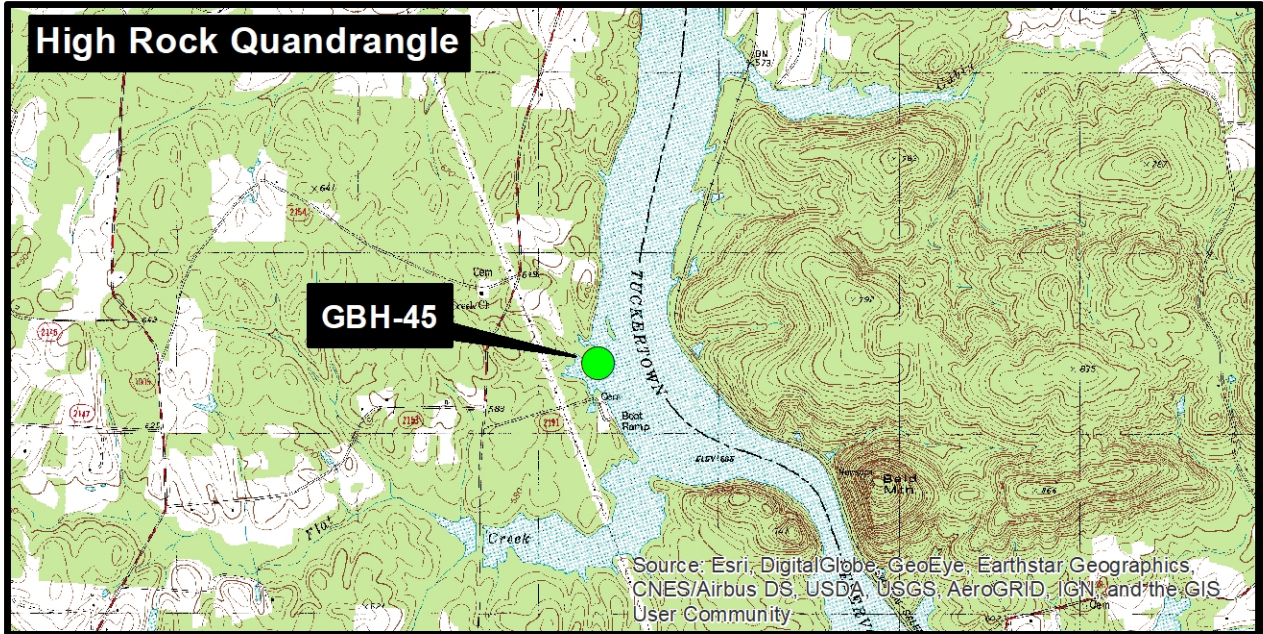
This new Great Blue Heron colony is located within a sheltered cove on the east side of the reservoir, just upstream from mouth of Ellis Creek. The shoreline of the creek is dominated by hardwoods, with a few scattered pines. Herons are utilizing the scattered pines for nesting. On 29 March 2022, 3 pairs of GBHE were present laying and incubating.

***Aerial view of Great Blue Heron colony GBH-33 (photo 2017, B. Paxton).***





**Map location of Great Blue Heron colony GBH-45**

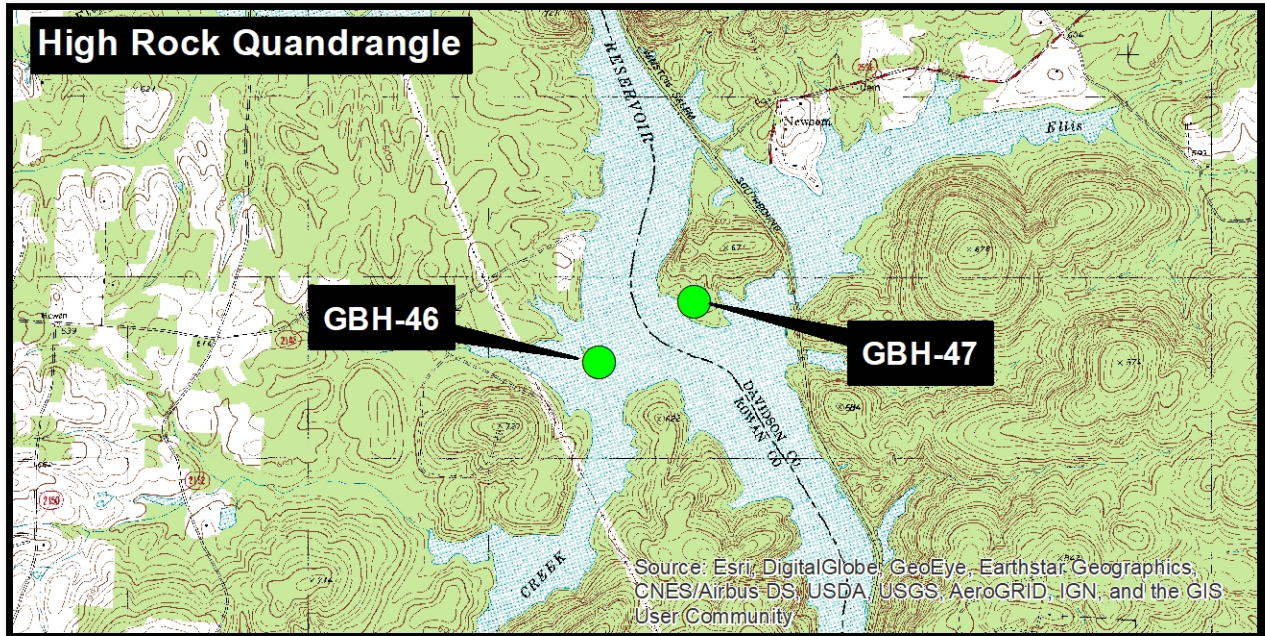


**Aerial view of Great Blue Heron colony GBH-45 (photo 2022, B. Paxton).**





**Map location of Great Blue Heron colonies GBH-46 and GBH-47**



**Aerial view of Great Blue Heron colony GBH-46 (photo 2022, B. Paxton).**





**Aerial view of Great Blue Heron colony GBH-47 (photo 2022, B. Paxton).**



**Narrows Reservoir**

**Bald Eagles**

Three occupied Bald Eagle territories with 2 active nests were located along the shoreline of Narrows Reservoir. The active nests were ST-12-01, an old known nest that produced a single chick and ST-22-02, a new nest along the power line right-of-way on the west side of the Badin dam, that produced 3 chicks. The other occupied territory was a new nest (ST-22-01) located on the south side of Palmer Island. ST-22-01 was lined but no other evidence of use was observed. It is possible that ST-22-01 could be a new nest location for now absent MO-03-01.

<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
MO-03-01	Montgomery	Badin	Y	N	N/A

**Nest Location**

This now absent nest was located along a bluff set back from the shoreline on Uwharrie National Forest. The nest tree is within a scattered stand of supercanopy trees. The nest does



not appear to be visible from the water along the shoreline but may be visible from logging road 6558. This nest has experienced damage in the past and due to its position, on top of a bluff, may be particularly susceptible to high winds.

### **Nesting Activity**

*Bird Activity* – No bird activity was observed at this former nest location in 2022.

*Nest Condition* – Nest was absent during flights on 29 March 2022

### **Nest Substrate**

*Substrate Type* – The nest was built in a live loblolly pine.

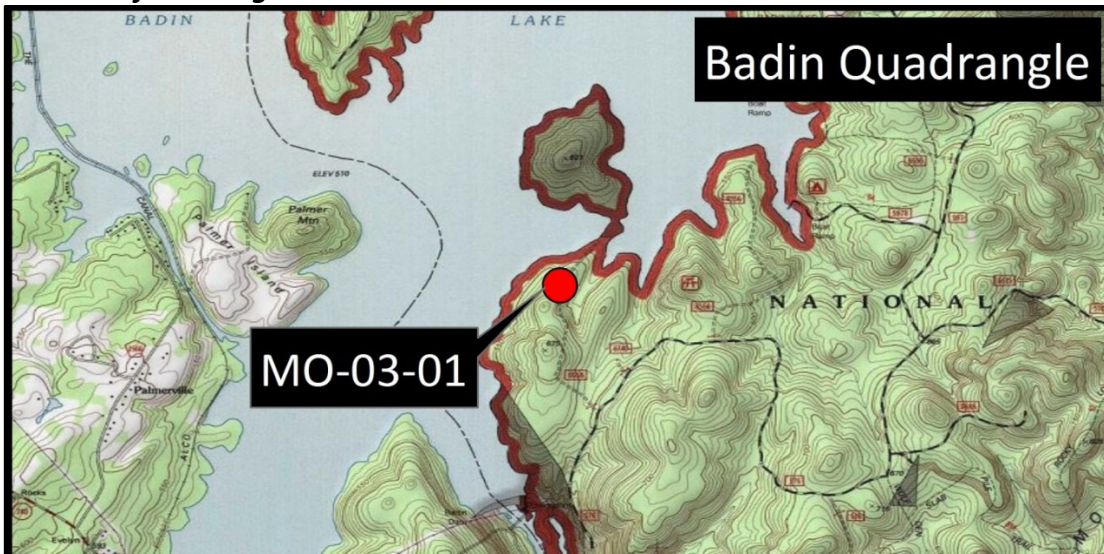
*Nest Position* – Nest was positioned on a lateral limb up against the trunk. Crown limbs are sparse such that sky exposure was 70%.

*Substrate Condition* – Nest tree had suffered some wind damage with broken limbs.

### **Potential Disturbance**

Nest tree was protected by a visual buffer of scattered trees. It does not appear to be visible from the shoreline, but may be seen and accessed from nearby logging road.

### ***Map location of Bald Eagle nest MO-03-01.***



***Aerial view of Bald Eagle nest MO-03-01 (photo 2011, B. Watts).***



<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
ST-12-01	Stanly	New London	Y	Y	1 chick

**Nest Location**

This nest is located near a power line right-of-way southeast of Tuckertown Dam. The tree may not be visible from the water due to a pine buffer along the shoreline and there are no public roads near this site.

**Nesting Activity**

*Bird Activity* – On 29 March 2022, a single 3 week old chick was observed in the nest along with an adult. On 2 June 2022, this chick had fledged.

*Nest Condition* – The nest was in good structural condition.



## **Nest Substrate**

*Substrate Type* – Nest was built in a loblolly pine tree. The tree is positioned along a power line corridor.

*Nest Position* – The nest was built in a top crotch of a loblolly pine. Although the nest was near the crown, it was shaded with only 30-40% sky exposure.

*Substrate Condition* – Nest tree was in good condition.

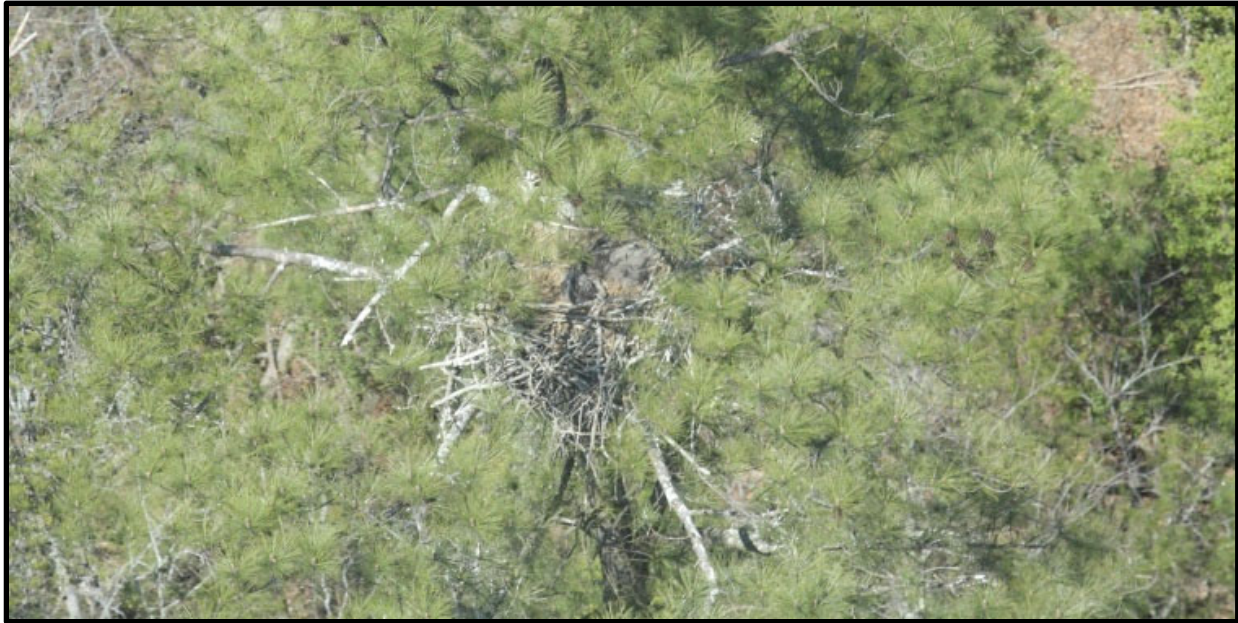
## **Potential Disturbance**

The nest tree was along a power line corridor. The site is remote from human disturbance. There is no road access into the site and it is unlikely that the nest is visible from the water due to a tree buffer along the shoreline.

### ***Map location of Bald Eagle nest ST-12-01.***



**Aerial view of Bald Eagle nest ST-12-01 (photo 2013, B. Paxton).**



Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
MO-13-01	Montgomery	Badin	N	N	N/A

**Nest Location**

This now absent nest was located on a small forested island near the Pine Haven residential development at the confluence of Beaverdam and Reynolds Creeks. The nest was located within the mixed Great Blue Heron and Great Egret colony on the island (GBH-05).

**Nesting Activity**

*Bird Activity* – No eagle activity was observed.

*Nest Condition* – This nest is now absent.

**Nest Substrate**

*Substrate Type* – Nest was in a supercanopy loblolly pine tree.

*Nest Position* – Nest was positioned in a high stable crotch. Nest was exposed with 70% sky exposure.



*Substrate Condition* – Cormorants are now using the nest tree. There is significant white wash on all trees along the southern shoreline of this island, which will eventually be detrimental to the trees.

**Potential Disturbance**

The reservoir is highly developed in this area with considerable boat traffic. Nest was exposed and boat traffic had the potential to disturb this nest.

<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
MO-13-02	Montgomery	Badin	N	N	N/A

**Nest Location**

This now absent nest was located in a relatively undeveloped section of mixed hardwood-pine forest, just south of Lanes Chapel. The Great Blue Heron colony GBH-27 is located in the same forest patch as this eagle nest.

**Nesting Activity**

*Bird Activity* – On both 29 March and 2 June 2022, no adults were observed near the nest site.

*Nest Condition* – Nest is absent. The nest was found to be missing during the productivity flight of 2016.

**Nest Substrate**

*Substrate Type* – Nest was built in a large supercanopy loblolly pine tree. Nest is surrounded by a Great Blue Heron colony (GBH-27).

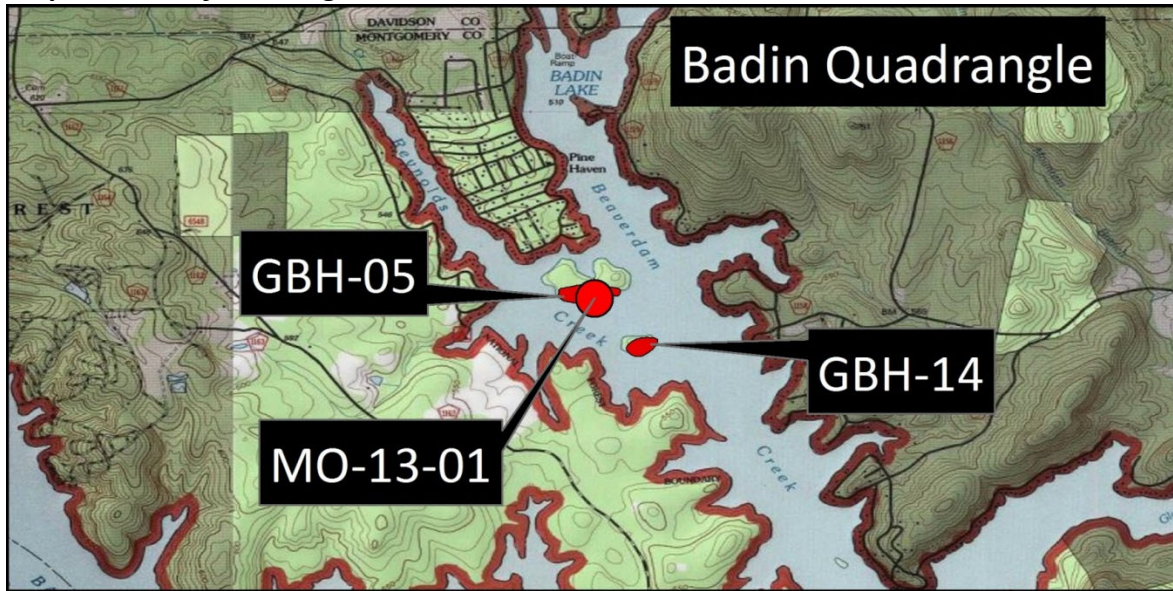
*Nest Position* – Nest was positioned in a stable crotch at the top of the tree. Nest was shaded and has approximately 25% sky exposure.

*Substrate Condition* – The nest tree appears to be in good condition.

**Potential Disturbance**

The nest appears to be in a relatively undisturbed portion of the lake. There are no nearby developments and the possibility of human disturbance at this site appears to be low.

**Map location of Bald Eagle nest MO-13-01.**

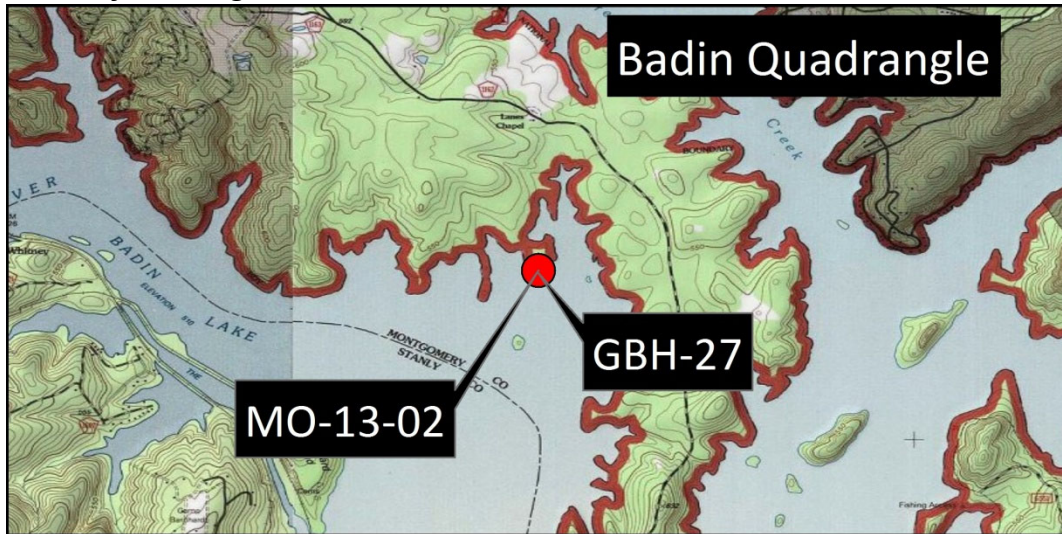


**Aerial photo of nest MO-13-01 (photo 2016; B. Paxton)**





**Map location of Bald Eagle nest MO-13-02.**



**Aerial photo of nest MO-13-02 (photo 2013, B. Paxton).**



Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
MO-17-02	Montgomery	Badin	N	N	N/A

**Nest Location**

This now absent nest was located on the southeast edge of a recent clearcut, in close proximity to a small industrial facility and Lanes Chapel Rd. This nest was most likely occupied by the eagle pair that used to occupy the now absent MO-13-02.



## Nesting Activity

*Bird Activity* – On both 29 March and 2 June 2022, no eagle activity was observed in the immediate vicinity of the nest.

*Nest Condition* – This nest now absent.

## Nest Substrate

*Substrate Type* – Nest was built in a large loblolly pine tree at the edge of a recent clearcut. The nest is in close proximity to a small industrial facility and Lanes Chapel Rd.

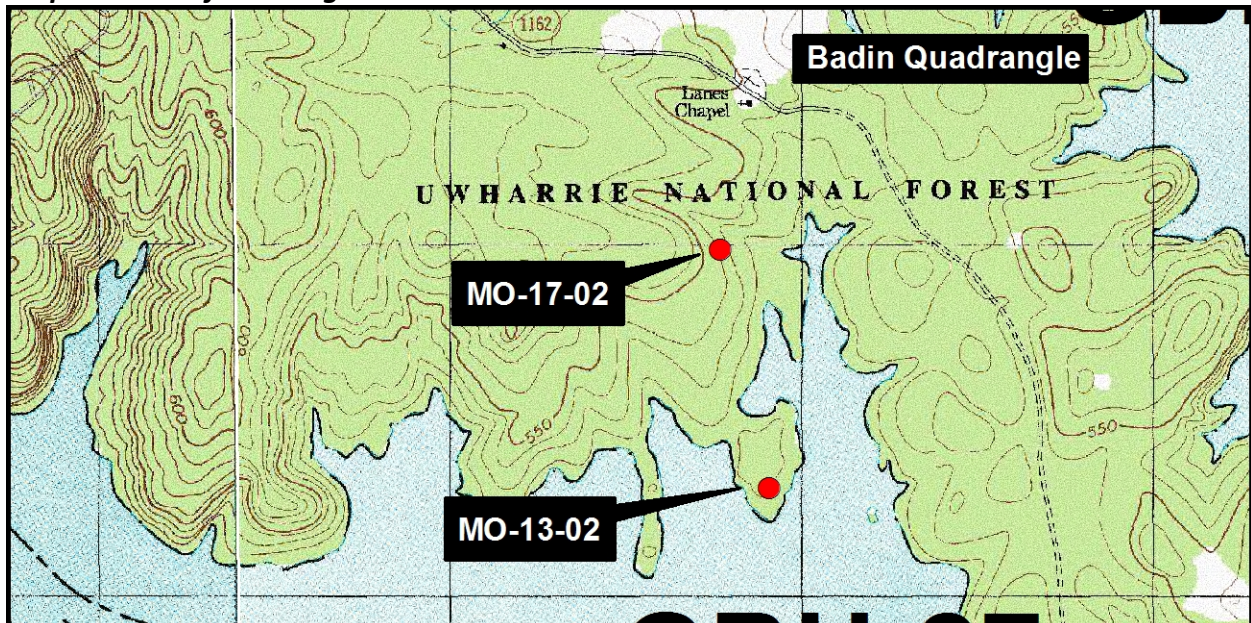
*Nest Position* – Nest was positioned in a stable crotch at the top of the tree. Nest was shaded and has approximately 75% sky exposure.

*Substrate Condition* – Nest tree is in good condition.

## Potential Disturbance

The nest appears to be visible from the industrial facility, less than 100m to the northeast. The nest would be easily accessible from Lanes Chapel Road or by trails near the nest.

### **Map location of Bald Eagle nest MO-17-02.**





**Aerial photo of nest MO-17-02 (photo 2017; B. Paxton).**



Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
MO-18-03	Montgomery	Badin	N	N	N/A

**Nest Location**

This now absent nest was located on the south edge of a recent clearcut, on the west side of Summerlake Drive, in very close proximity to a house. This nest was most likely occupied by the eagle pair that used to occupy the now absent nests MO-13-02 and MO-17-02.

**Nesting Activity**

*Bird Activity* – – On both 29 March and 2 June 2022, no eagle activity was observed in the immediate vicinity of the nest.

*Nest Condition* – This nest was severely damaged in 2020 and was absent on 30 March 2021.

**Nest Substrate**

*Substrate Type* – Nest was built in a large loblolly pine tree at the edge of a recent clearcut. The nest is in close proximity to a house at the end of Summerlake Drive.

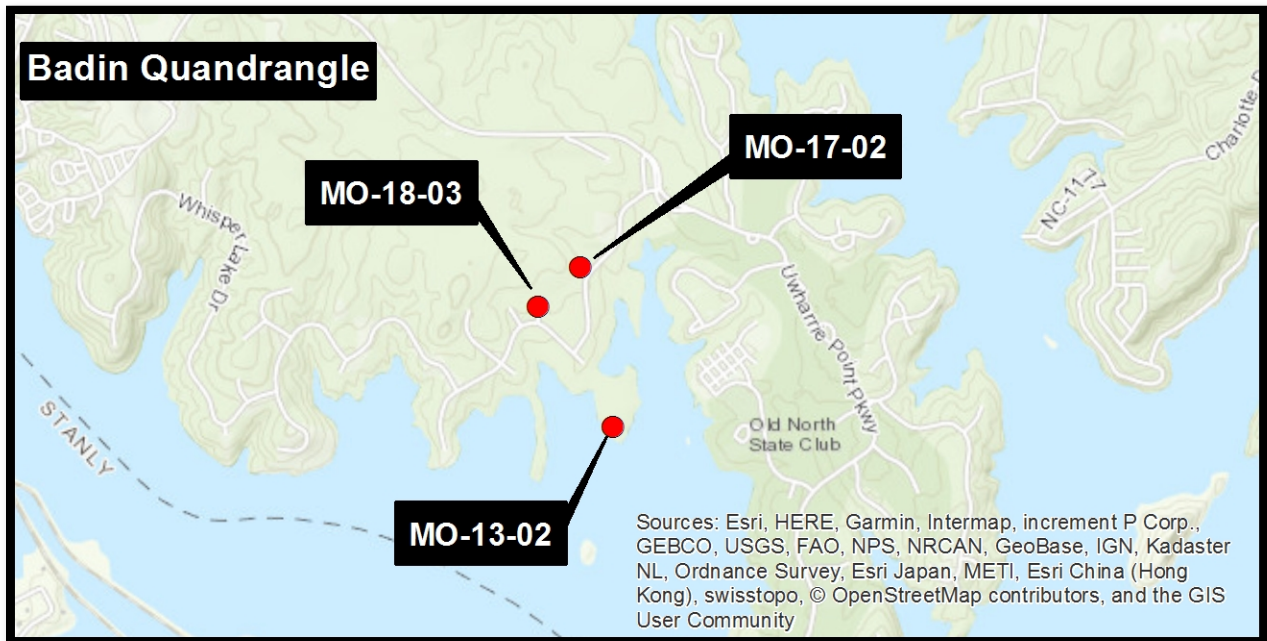
*Nest Position* – Nest was positioned in a stable crotch at the top of the tree. Nest was quite open and has approximately 75% sky exposure.

*Substrate Condition* – Nest tree is in good condition.

**Potential Disturbance**

The nest is very near Summerlake Drive and would be visible from the road. Disturbance would be likely from the road. However, this is most likely a replacement nest for nest MO-17-02, which was also built near human activity. This pair seems to be acclimated to some level of human disturbance.

***Map location of Bald Eagle nest MO-18-03.***



Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
MO-18-02	Montgomery	Badin	N	N	N/A

**Nest Location**

This now absent nest was located on the south shore of a cove on the north shore of Narrows Reservoir, northeast of Whitney. This was an older nest that had been overlooked on previous flights.

**Nesting Activity**

*Bird Activity* – No eagle activity was observed at this nest site during 2022 surveys.



***Aerial photo of nest MO-18-03 (photo 2018; B. Paxton)***



*Nest Condition* – This nest is absent.

**Nest Substrate**

*Substrate Type* – Nest was built in a large pine tree on the north shore of a cove on the north shore of Narrows Reservoir, northeast of Whitney.

*Nest Position* – Nest was positioned on a lateral branch high in the tree facing to the north. Considerable canopy over the nest but the nest was open to the north with approximately 50% sky exposure.

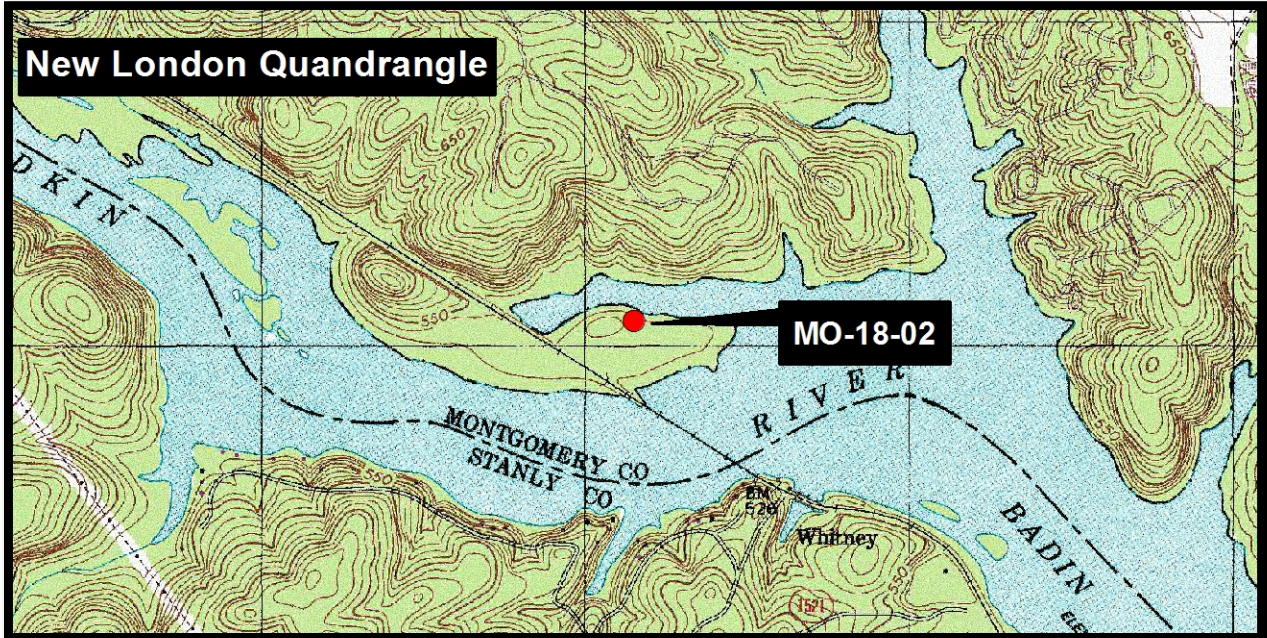
*Substrate Condition* – Nest tree is in good condition.

**Potential Disturbance**

The nest is very close to the shore of the cove, and would be visible from the water. Disturbance from boaters would be possible.



**Map location of Bald Eagle nest MO-18-02.**



**Aerial photo of nest MO-18-02 (photo 2018; B. Paxton)**





Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
MO-19-01	Montgomery	Badin	N	N	N/A

**Nest Location**

This nest is located well inland and south of Gladly Creek, within a thinned pasture on an active farm. This appears to be an older nest that had been overlooked on previous flights.

**Nesting Activity**

*Bird Activity* – No eagle activity was observed at this nest.

*Nest Condition* – This is older nest and has not been maintained. On 29 March 2022, the nest was observed to be severely damaged with just a remnant left in the tree.

**Nest Substrate**

*Substrate Type* – Nest was built in a large hardwood within a thinned pasture on an active farm.

*Nest Position* – Nest is positioned in the main crotch of the trunk approximately 2/3 up from the base of the tree. During leaf out this nest would likely be difficult to observe, but during leaf off it has 100% sky exposure.

*Substrate Condition* – Nest tree is in good condition.

**Potential Disturbance**

The nest is very close to building and is in what appears to be in a pasture on an active farm. Any disturbance would be the result of farm activities.

Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
ST-22-01	Stanley	Badin	Y	N	N/A

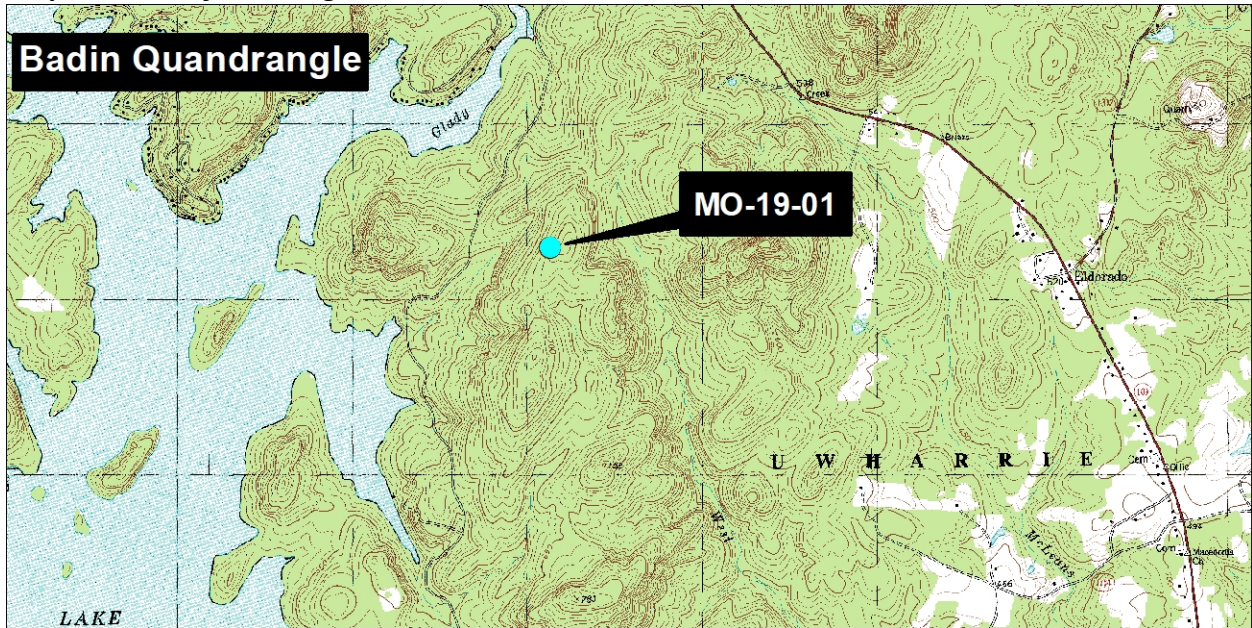
**Nest Location**

This nest is located inland on the south side of Palmer Island, within a thinned stand of medium aged pines. It is likely that ST-22-01 is a replacement nest for the now absent MO-03-01

**Nesting Activity**

*Bird Activity* – On 29 March 2022, this new nest was discovered but no eagles were observed.

**Map location of Bald Eagle nest MO-19-01.**



**Aerial photo of nest MO-19-01 (photo 2019; B. Paxton).**





*Nest Condition* – On 29 March 2022, this new nest construction was discovered and was observed to have been lined. On 2 June 2022, no other evidence of breeding activity was observed.

### **Nest Substrate**

*Substrate Type* – Nest is in medium aged pine within a thinned pine plantation.

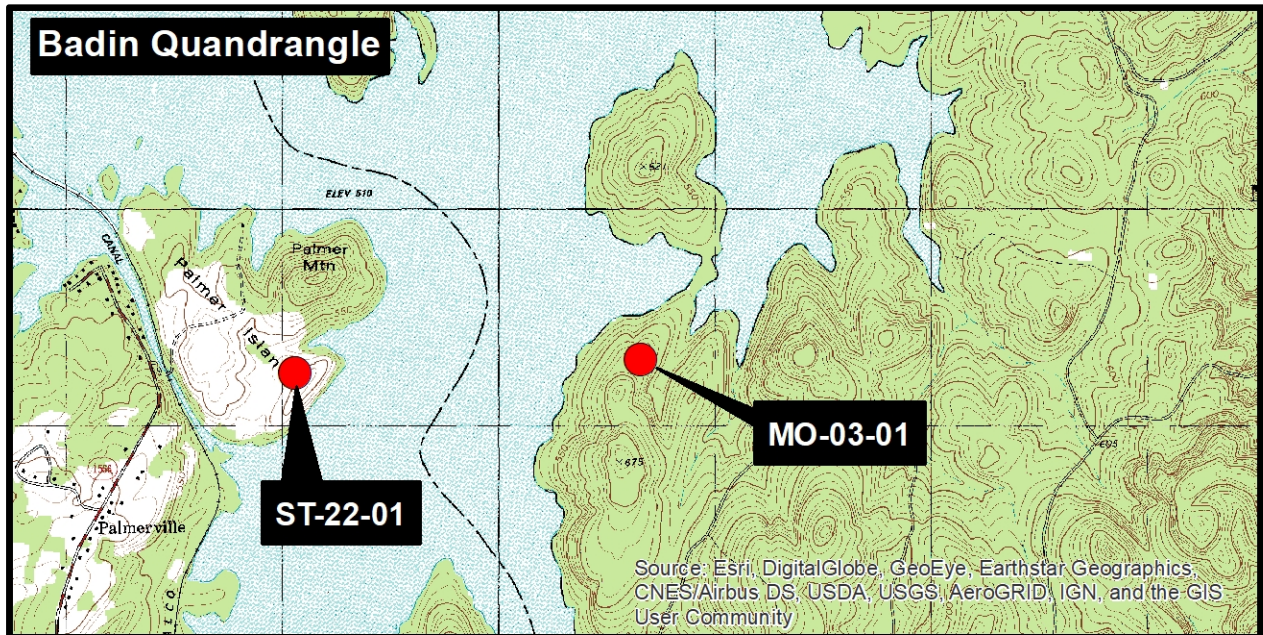
*Nest Position* – Nest is positioned in terminal crotch of the main stem with tall branched radiating around and above the nest. Branches above obscure the nest from overhead with an estimated 25% sky exposure.

*Substrate Condition* – Nest tree is in good condition.

### **Potential Disturbance**

The nest is set away from the shoreline within a pine plantation. Disturbance would likely only occur from logging operations.

### ***Map location of Bald Eagle nest ST-22-01.***



**Aerial photo of nest ST-22-01 (photo 2022; B. Paxton).**



Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
ST-22-02	Stanley	Badin	Y	Y	3

**Nest Location**

This new nest is located along the north side of the power line right-of-way extending westward from the Badin Dam. The nest is very near parking or staging areas along the access road to the west side of the dam. It is likely that ST-22-02 is a replacement nest for the now absent MO-18-01.

**Nesting Activity**

*Bird Activity* – On 29 March 2022, an adult was observed feeding 3 chicks approximately 5 weeks old. On 2 June 2022, the chicks had fledged.

*Nest Condition* – On 29 March 2022, this new nest construction was discovered and was observed to be in good condition.



## Nest Substrate

*Substrate Type* – Nest is in mature pine just inside the edge of a power line right-of-way.

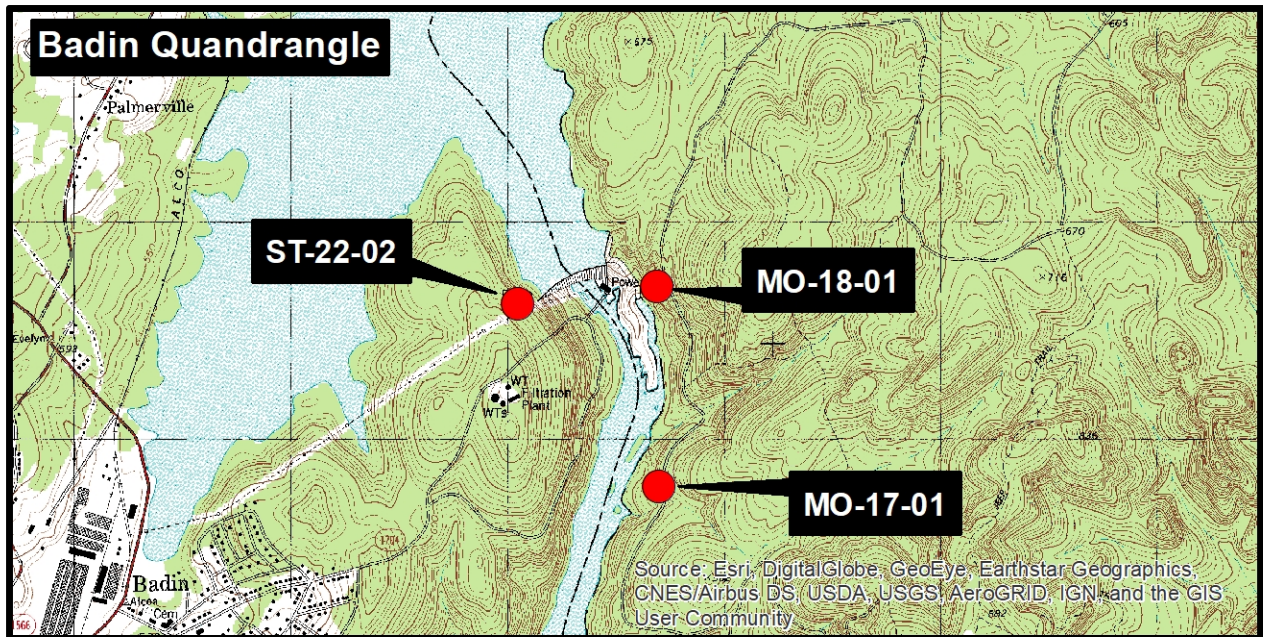
*Nest Position* – Nest is positioned at the top of the tree on lateral branch extending toward the right-of-way. Visibility is good from the right of way with 50-75% sky exposure.

*Substrate Condition* – Nest tree is in good condition.

## Potential Disturbance

The nest is along a power line right-of-way and very near parking or staging areas along the access road to the west side of the Badin dam. Disturbance is likely from any right-of-way-activities or prolonged activities at the parking/staging areas.

### **Map location of Bald Eagle nest ST-22-01.**



**Aerial photo of nest ST-22-01 (photo 2022; B. Paxton).**



**Great Blue Herons/Great Egrets/Double-crested Cormorants**

Nine active colonies of breeding Great Blue Herons, Great Egrets, and/or Double-crested Cormorants were detected within Narrows Reservoir during the 2022 survey. Double-Crested Cormorants (DCCO) continue to nest within colony GBH-14, have completely taken over GBH-08, and have moved into GBH-05. A single pair of Great Egrets was observed in GBH-22. The total population estimates for pairs of Great Blue Herons, Great Egrets and Double-Crested Cormorants within Narrows Reservoir was 303, 1, and 515 respectively.

Code	County	Topo Quad	Pairs
GBH-05	Montgomery	Badin	225 GBHE, 400 DCCO

**GBH-05 Colony Description**

This Great Blue Heron colony is located on a small, forested island near the Pine Haven residential development at the confluence of Beaverdam and Reynolds Creeks. The drainage is highly developed in this area with considerable boat traffic. The island supports a middle-aged stand of loblolly pines with numerous canopy gaps. Nests were built throughout the stand. The



colony was estimated to contain 225 pairs of Great Blue Herons. On 29 March 2022, all pairs were laying and incubating. Cormorants have moved in along the southern shoreline and on 2 June 2022 and estimated 400 pairs present.

Code	County	Topo Quad	Pairs
GBH-08	Stanly	Badin	100 DCCO

#### **GBH-08 Colony Description**

This colony is located on a small, forested island along the western shoreline of Badin Lake between Graveyard Island and Palmer Island. The island is well isolated from shoreline but subject to regular boat traffic. Nests were once scattered in loblolly pines throughout the center of the island. Increasing numbers of cormorants have killed many trees and the species has completely taken over the colony. On 2 June 2022, an estimated 100 pairs of DCCO were observed incubating and feeding small chicks.

Code	County	Topo Quad	Pairs
GBH-14	Montgomery	Badin	2 GBHE, 15 DCCO

#### **GBH-14 Colony Description**

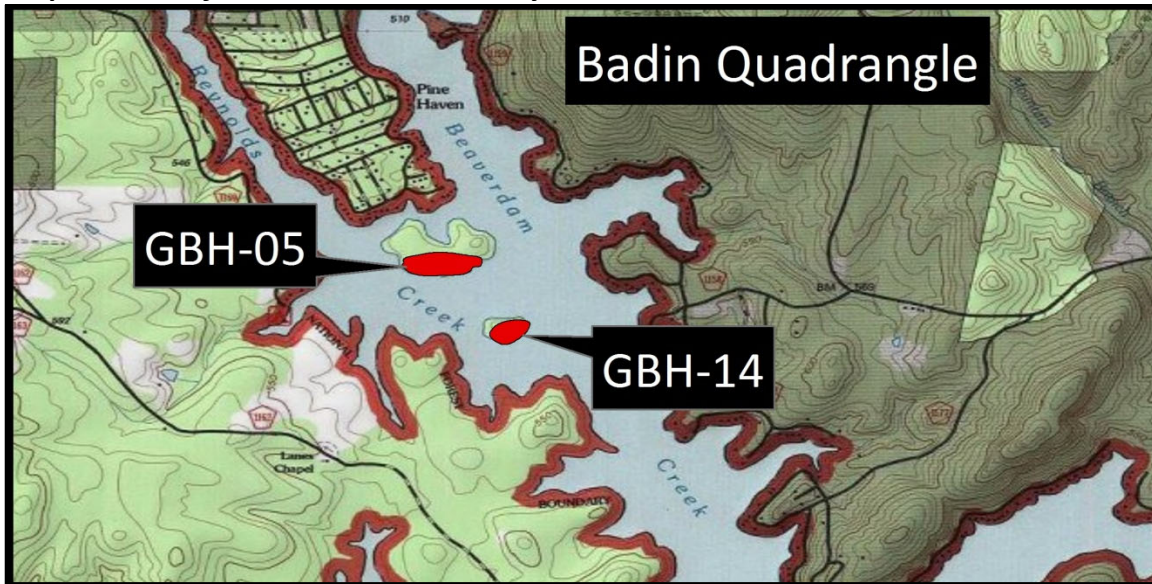
This Great Blue Heron colony is located on a small, forested island within the confluence of Reynolds and Beaverdam Creeks. The island is well isolated from the shoreline. The forest was dominated by loblolly pines. Tree loss has been extensive due to nesting cormorants and wind events. Numbers of both nesting herons and cormorants have been reduced. The vast majority of cormorants have moved and are now nesting in GBH-05. On 2 June 2022, only 2 pairs of GBHE and 15 pairs of DCCO were observed nesting on the island.

Code	County	Topo Quad	Pairs
GBH-22	Stanly	Badin	15 GBHE, 1 GREG

#### **GBH-22 Colony Description**

This Great Blue Heron colony is located in a patch of forested land along Badin Lake on the northwest corner of Palmer Island. On 29 March 2022, there were 15 nesting pairs of GBHE t laying and incubating. On 2 June 2022, a single pair of GREG were observed incubating.

**Map location of Great Blue Heron colony GBH-05.**

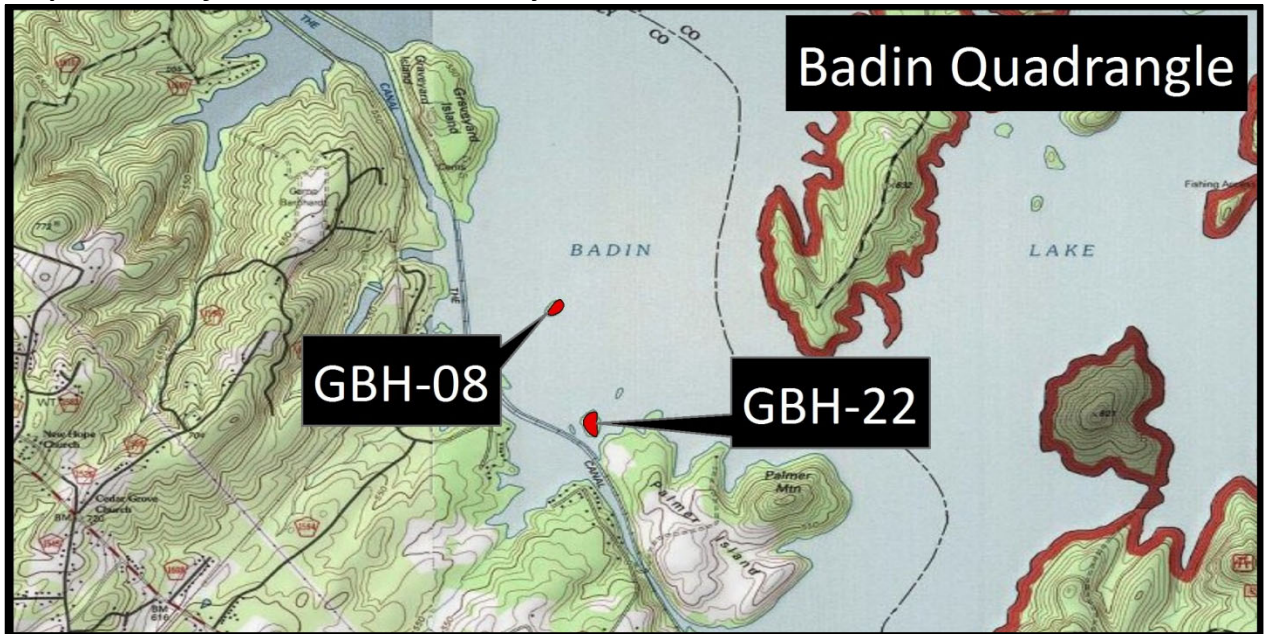


**Aerial picture of Great Blue Heron colony GBH-05 (photo 2006, B. Watts).**





**Map location of Great Blue Heron colony GBH-08.**

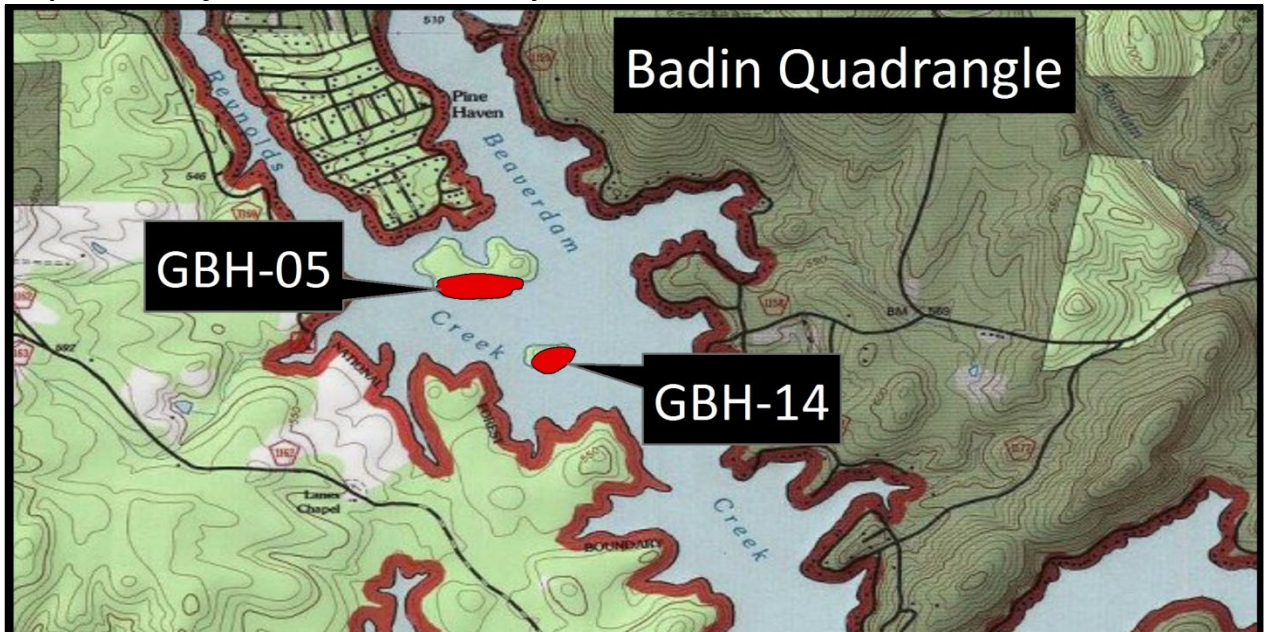


**Aerial picture of Great Blue Heron colony GBH-08 (photo 2011, B. Watts).**





**Map location of Great Blue Heron colony GBH-14.**

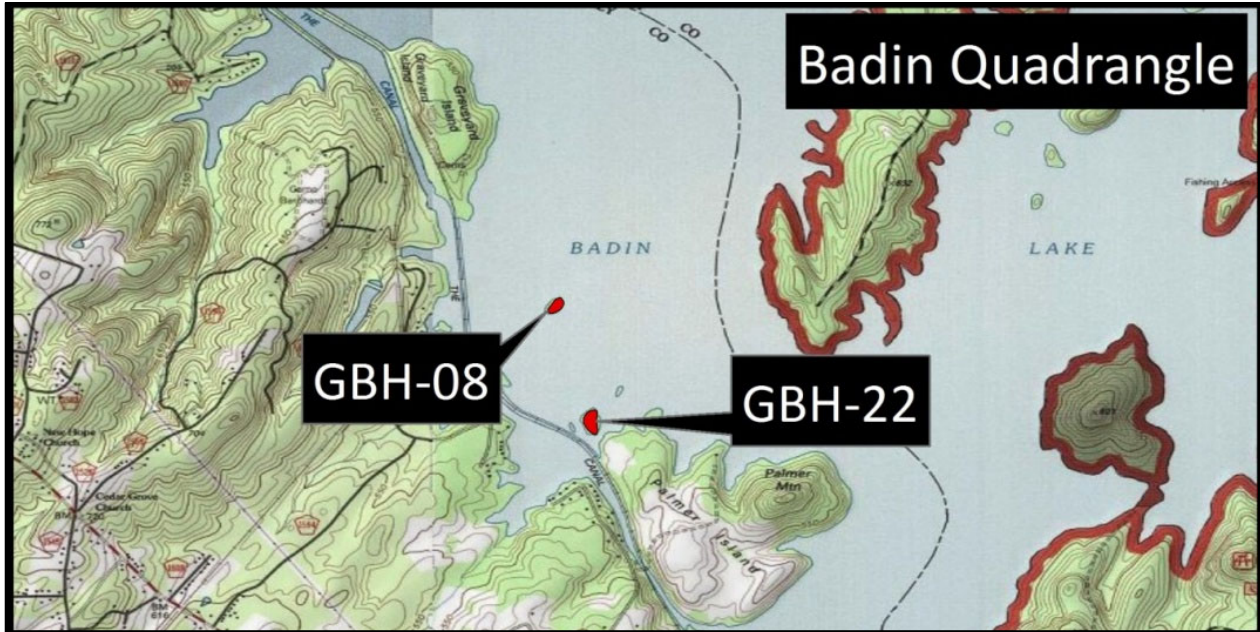


**Aerial picture of Great Blue Heron colony GBH-14 (photo 2014, B. Paxton).**





**Map location of Great Blue Heron colony GBH-22.**

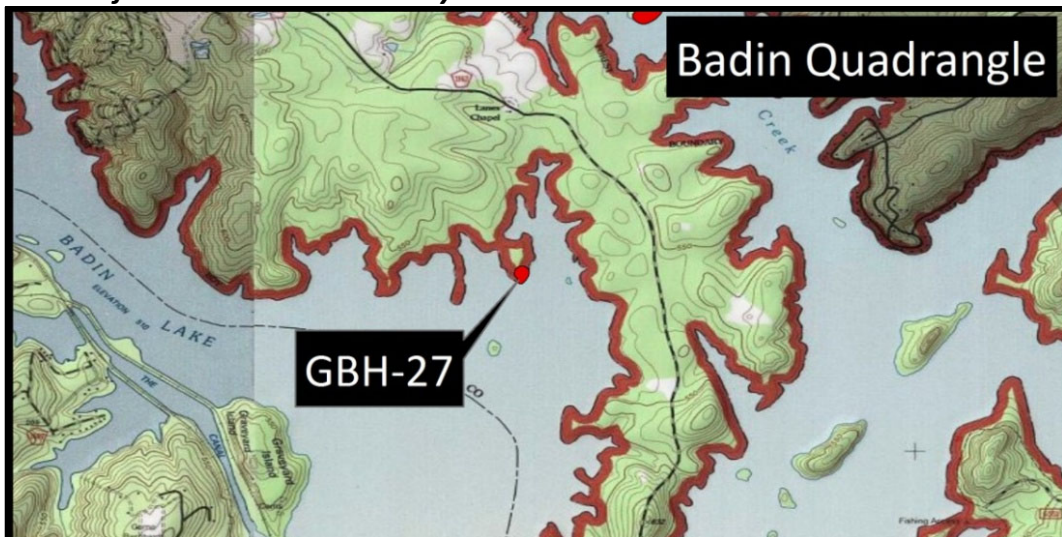


Code	County	Topo Quad	Pairs
GBH-27	Stanly	Badin	0 GBHE

**GBH-27 Colony Description**

This Great Blue Heron colony was located in a patch of forested land along Badin Lake, south of Lanes Chapel. Bald Eagle nest MO-13-02 was located within this colony. On both 29 March and 2 June 2022, no nesting pairs were observed.

**Map location of Great Blue Heron colony GBH-27.**

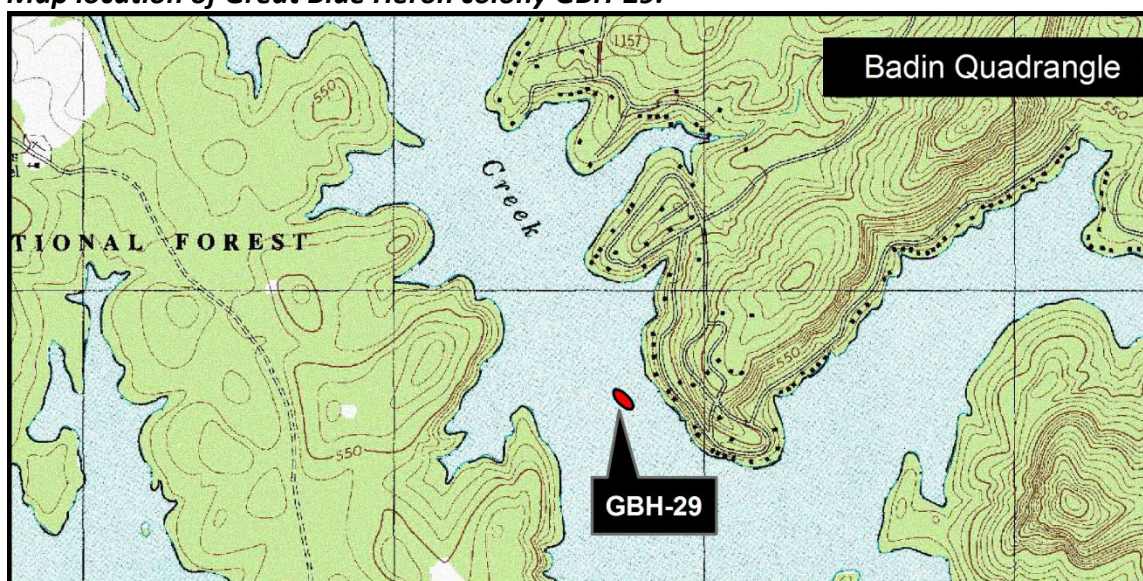


Code	County	Topo Quad	Pairs
GBH-29	Montgomery	Badin	2 GBHE

### **GBH-29 Colony Description**

This Great Blue Heron colony is located on a small forested island near the confluence of Glady and Beaverdam Creeks. The island is well isolated from the shoreline. The forest was dominated by loblolly pines with mixed hardwoods. On 29 March 2022, there were 2 nesting pairs of GBHE present, both pairs were incubating.

### **Map location of Great Blue Heron colony GBH-29.**



Code	County	Topo Quad	Pairs
GBH-31	Montgomery	New London	0 GBHE

### **GBH-31 Colony Description**

This Great Blue Heron colony was located on a forested island downstream of the Tuckertown Dam. The island is isolated from the shoreline. Flooded hardwood trees dominated the forest. On both 29 March and 2 June 2022, no breeding pairs of Great Blue herons were observed.

***Aerial picture of Great Blue Heron colony GBH-29 (photo 2014, B. Paxton).***





Code	County	Topo Quad	Pairs
GBH-32	Stanley	New London	6 GBHE

**GBH-32 Colony Description**

This Great Blue Heron colony is located on a small, forested island adjacent to the southern shore of the main stem of the reservoir, south of the mouth of Garr Creek. The island is well isolated from the shoreline. The forest is mainly composed of hardwood trees with a few taller pines. On 29 March 2022, 10 pairs of herons were observed incubating on nests in the taller pines.

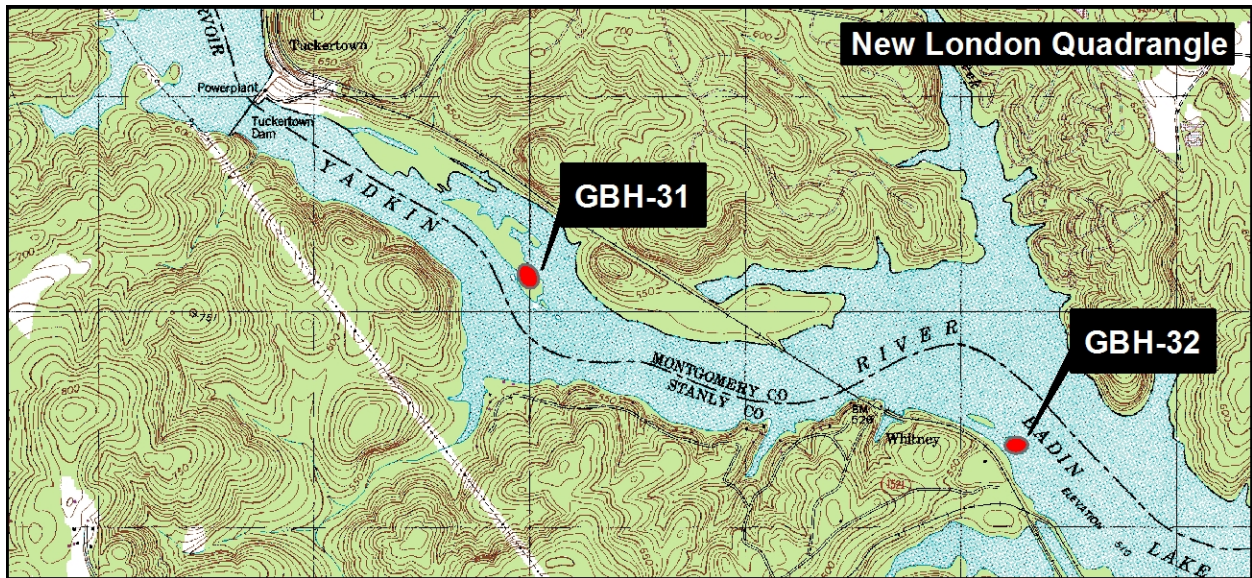
Code	County	Topo Quad	Pairs
GBH-38	Montgomery	Badin	20 GBHE

**GBH-38 Colony Description**

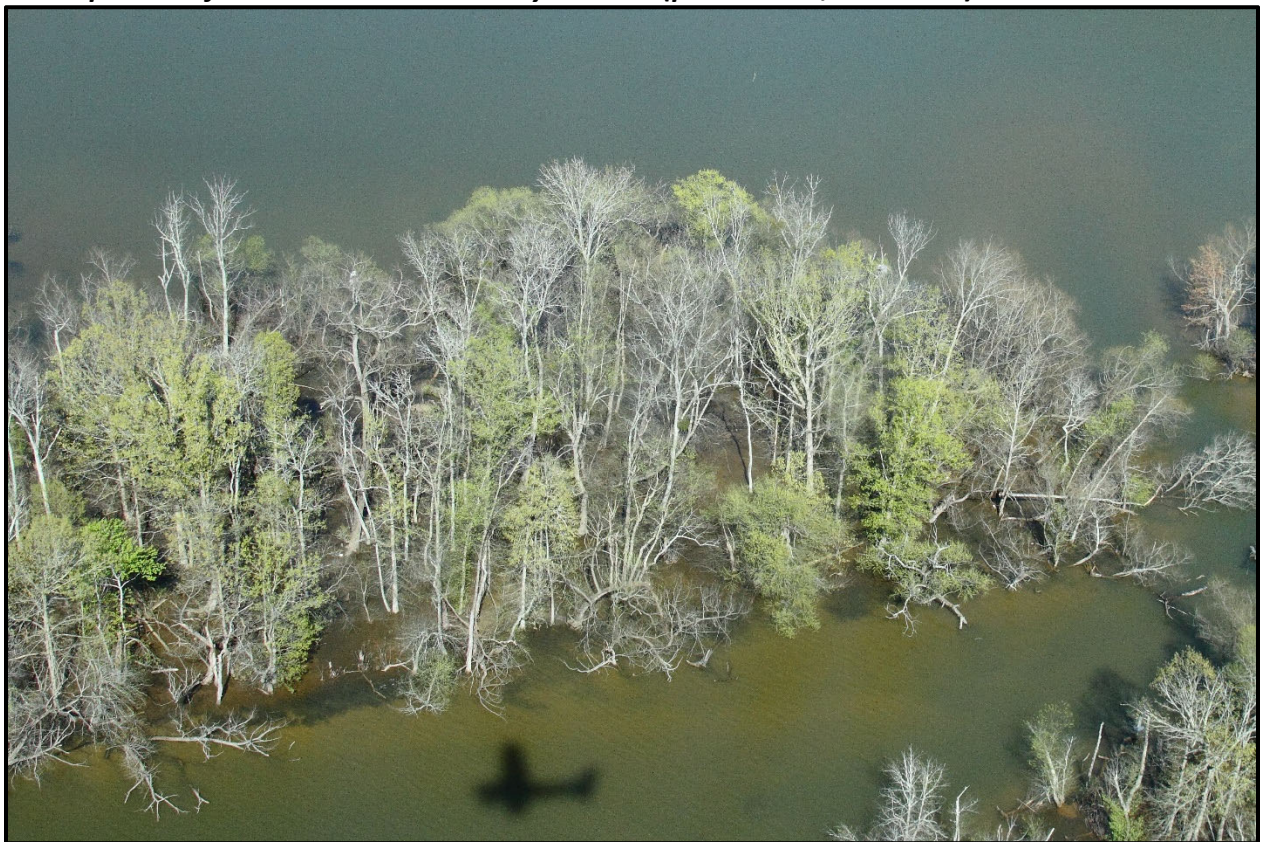
This Great Blue Heron colony is located on a small forested island adjacent to the north shoreline, just below the Narrows Dam. It is approximately 1000m upstream from GBH-31. The island is somewhat isolated from the shoreline. The forest is dominated by hardwoods. On 29 March 2022, there were 20 nesting pairs present, all pairs were laying and incubating.

***Map location of Great Blue Heron colony GBH-31 and GBH-32***





***Aerial picture of Great Blue Heron colony GBH-31 (photo 2016, B. Paxton).***

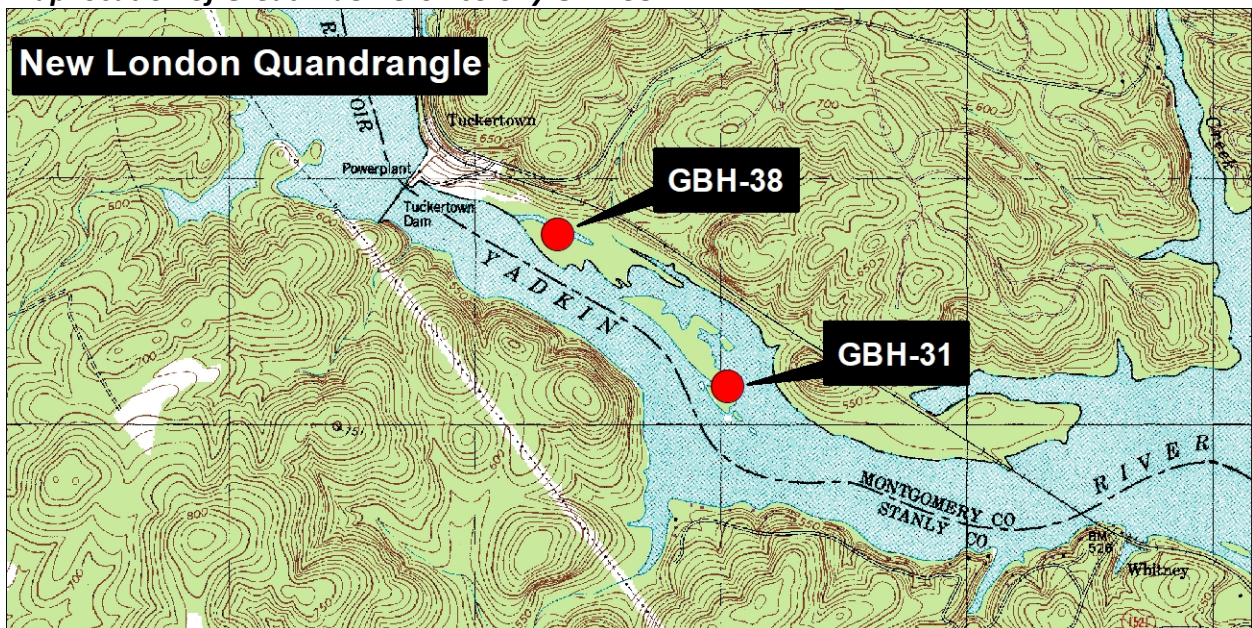


***Aerial picture of Great Blue Heron colony GBH-32 (photo 2016, B. Paxton).***





**Map location of Great Blue Heron colony GBH-38.**



**Aerial picture of Great Blue Heron colony GBH-38 (photo 2019, B. Paxton).**





Code	County	Topo Quad	Pairs
GBH-39	Montgomery	Badin	25 GBHE

**GBH-39 Colony Description**

This Great Blue Heron colony is located on a small, forested point, just south of the southern mouth of The Canal, and east of Palmerville. The point is mixed hardwoods and pines and is easily accessible from water. On 29 May 2022, there were 25 nesting pairs of GBHE present, most were incubating.

Code	County	Topo Quad	Pairs
GBH-41	Stanley	New London	8 GBHE

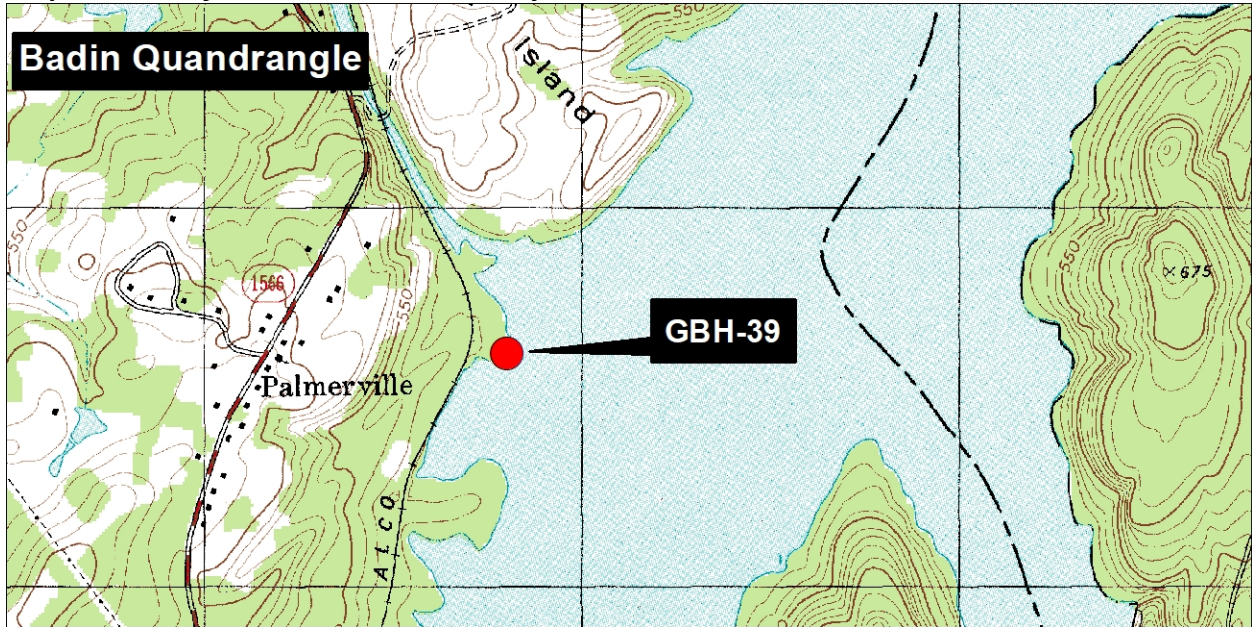
**GBH-41 Colony Description**

This Great Blue Heron colony is located on a small, forested island adjacent to the southern shore of the main stem of the reservoir, south of the mouth of Garr Creek. The island is well isolated from the shoreline. The forest is mainly composed of hardwood trees with a few taller

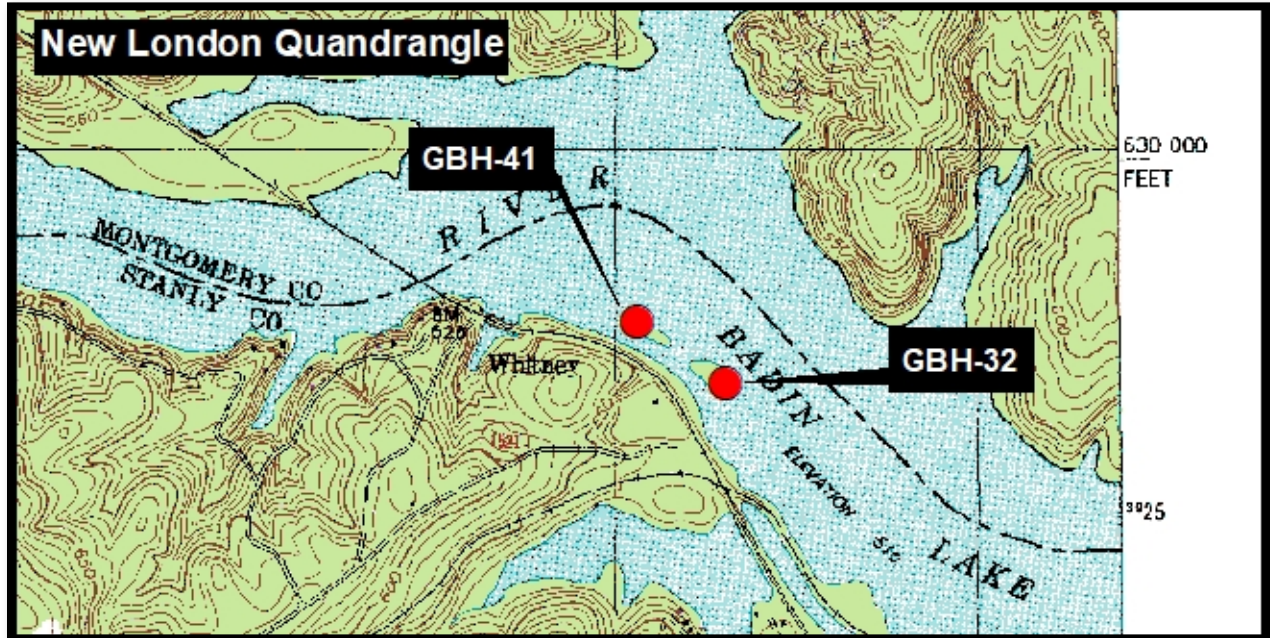


pin. This island is located just upstream from the island that contains GBH-32. On 29 March 2022, 8 pairs of herons were observed nesting. All pairs appeared to be laying and incubating.

**Map location of Great Blue Heron colony GBH-39.**



**Map location of Great Blue Heron colony GBH-41.**





**Aerial picture of Great Blue Heron colony GBH-41 (photo 2020, B. Paxton).**



**Falls Reservoir**

**Bald Eagles**

One active Bald Eagle territory and nest was present along this waterway during the 2022 survey. The single active nest was nest ST-20-01, built very near the location of the now absent ST-08-01 and ST-10-01. ST-20-01 produced 2 chicks.

Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
ST-08-01	Stanly	Badin	Y	N	N/A

**Nest Location**

This now absent nest was located within a stand of mixed pine-hardwood forest near the shoreline on Morrow Mountain State Park. The nest tree is just north of an active parking lot. The nest was in a forest stand with buffers on all sides. The nest was likely visible during the winter months from both the water and the parking lot. While used by a Great-horned Owl in 2013 this nest is now absent.



Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
ST-10-01	Stanly	Badin	Y	N	N/A

**Nest Location**

This now absent nest was located within a stand of mixed pine-hardwood forest near the shoreline on Morrow Mountain State Park. The nest tree is southeast of ST-08-01. The nest was in a forest stand with buffers on all sides. The nest was likely visible during the winter months from both the water and the parking lot.

**Nesting Activity**

*Bird Activity* – On 29 March 2022, eagle activity was observed at the nearby nest ST-20-01.

*Nest Condition* – This nest is now absent.

**Nest Substrate**

*Substrate Type* – The nest was built in a supercanopy loblolly pine within a cluster of similar sized trees.

*Nest Position* – The nest was built in a spray of limbs surrounding a single-leader top. The nest surface had less than 30% sky exposure.

*Substrate Condition* – The nest tree was in good condition.

**Potential Disturbance**

Nest tree is protected by a forest buffer on all sides. The nest is close to the water and may be visible during the winter. Given the location, potential for human disturbance seems low.

Nest Code	County	Topo Quad	Active Territory	Active Nest	Chicks Produced
ST-20-01	Stanly	Badin	Y	Y	2

**Nest Location**

This nest is located within a stand of mixed pine-hardwood forest near the shoreline on Morrow Mountain State Park. The nest tree is just northeast of the location of the now absent ST-10-01. The nest is in a forest stand with buffers on all sides.

## Nesting Activity

*Bird Activity* – On 29 March 2022 and 2 5-week-old chicks were observed in the nest. By 2 June 2022, both chicks had fledged.

*Nest Condition* – This nest is in good condition.

## Nest Substrate

*Substrate Type* – The nest was built in a supercanopy loblolly pine within a cluster of similar sized trees.

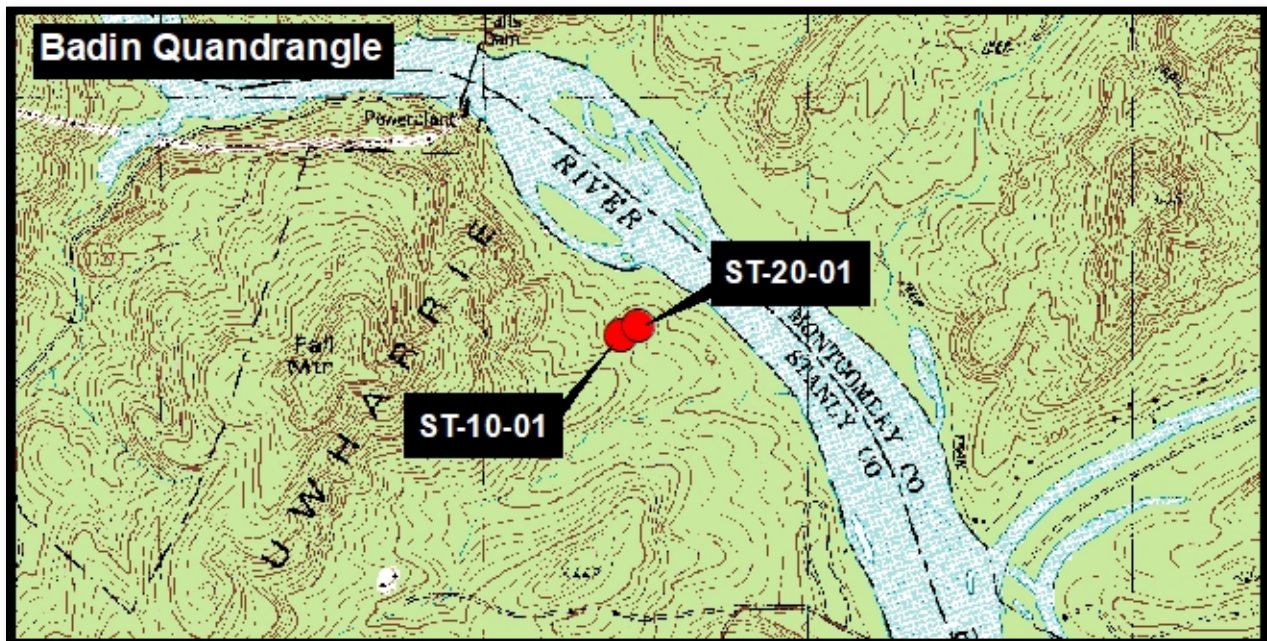
*Nest Position* – The nest was built near the terminal crown. Visibility into the nest is good.

*Substrate Condition* – The nest tree was in good condition.

## Potential Disturbance

The nest tree is protected by a forest buffer on all sides. The nest is approximately 200 meters from the shoreline and 500m from a park building and parking lot. Nest may be visible during winter months from both parking lot and water. Given the location, potential for human disturbance seems low.

**Map location of Bald Eagle nest ST-10-01 and ST-20-01.**





***Aerial view of nest ST-10-01 (photo 2011: B. Watts).***



***Aerial view of nest ST-20-01 (photo 2020: B. Paxton).***



<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
MO-17-01	Montgomery	Badin	N	N	N/A

**Nest Location**

This now absent nest was located on the steep east shore of Falls Reservoir, in a sparse stand of pines surrounded by hardwoods. The nest was located within the Uwharrie National Forest directly adjacent to FS road 576 (Moccasin Creek Rd).

**Nesting Activity**

*Bird Activity* –No eagle activity was observed near this now absent nest during the 2022 surveys.

*Nest Condition* – This nest now absent.

**Nest Substrate**

*Substrate Type* – The nest was built high in the canopy of a pine within a sparse patch of similar sized pines, surrounded by hardwoods.

*Nest Position* – The nest was built on high branches on the east side of the tree. The nest surface had approximately 50% sky exposure.

*Substrate Condition* – The nest tree was in good condition.

**Potential Disturbance**

Nest tree is directly adjacent to FS road 576 (Moccasin Creek Rd) very near what appears to be a pull off. This road is open at certain time of the year as part of an ATV/Jeep trail. Disturbance is likely if this trail is used for recreation during the breeding season.





<b>Nest Code</b>	<b>County</b>	<b>Topo Quad</b>	<b>Active Territory</b>	<b>Active Nest</b>	<b>Chicks Produced</b>
MO-18-01	Montgomery	Badin	Y	N	N/A

**Nest Location**

This nest was located on the forested steep east shore of Falls Reservoir, between the spillway of Narrows Dam and FS road 576 (Moccasin Creek Rd). This nest is a possible replacement nest for the now inactive nest MO-17-01.

**Nesting Activity**

*Bird Activity* – No eagle activity was observed at this nest site during the 2022 surveys. It is likely this pair has moved to the new active nest (ST-22-02) on the other side of Badin Dam.

*Nest Condition* – On 29 March 2022, the remnants of this nest were found to be absent.

**Nest Substrate**

*Substrate Type* – The nest was built high in the canopy of an older pine within a patch of mixed pine and hardwoods.

*Nest Position* – The nest was built in a high crook with dense branches above. The nest surface had approximately 50% sky exposure.

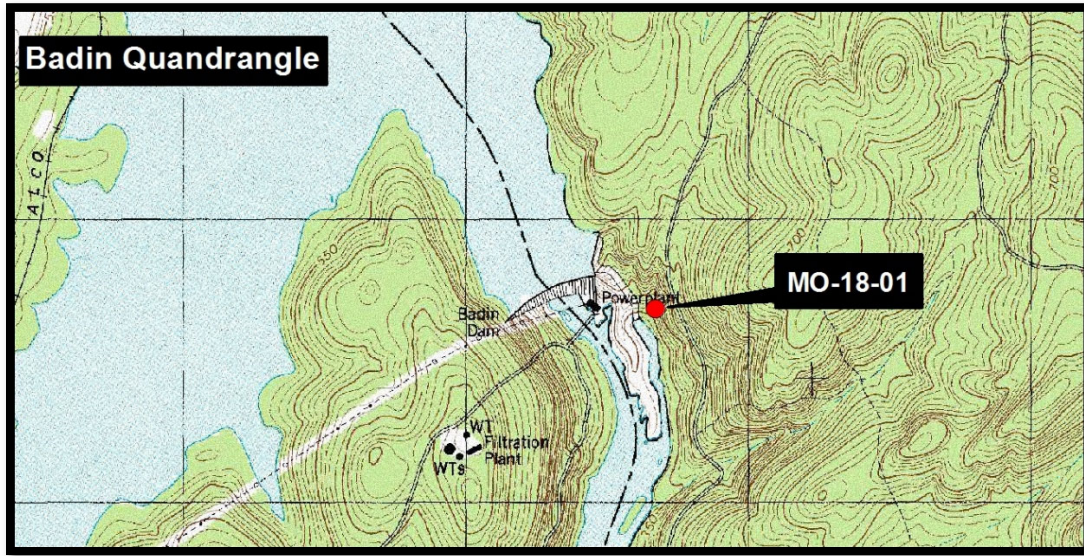
*Substrate Condition* – The nest tree was in good condition.

**Potential Disturbance**

Nest tree is located between the spillway of Narrows Dam and FS road 576 (Moccasin Creek Rd). This road is open at certain times of the year as part of an ATV/Jeep trail. It is unlikely that this nest would be visible from Moccasin Creek Rd. at any time other than completed leaf off. This nest could be accessed by Moccasin Creek Rd., but disturbance seems unlikely.



**Map location of Bald Eagle nest MO-18-01.**



**Aerial view of nest MO-18-01 (photo 2017: B. Paxton).**





## Great Blue Heron

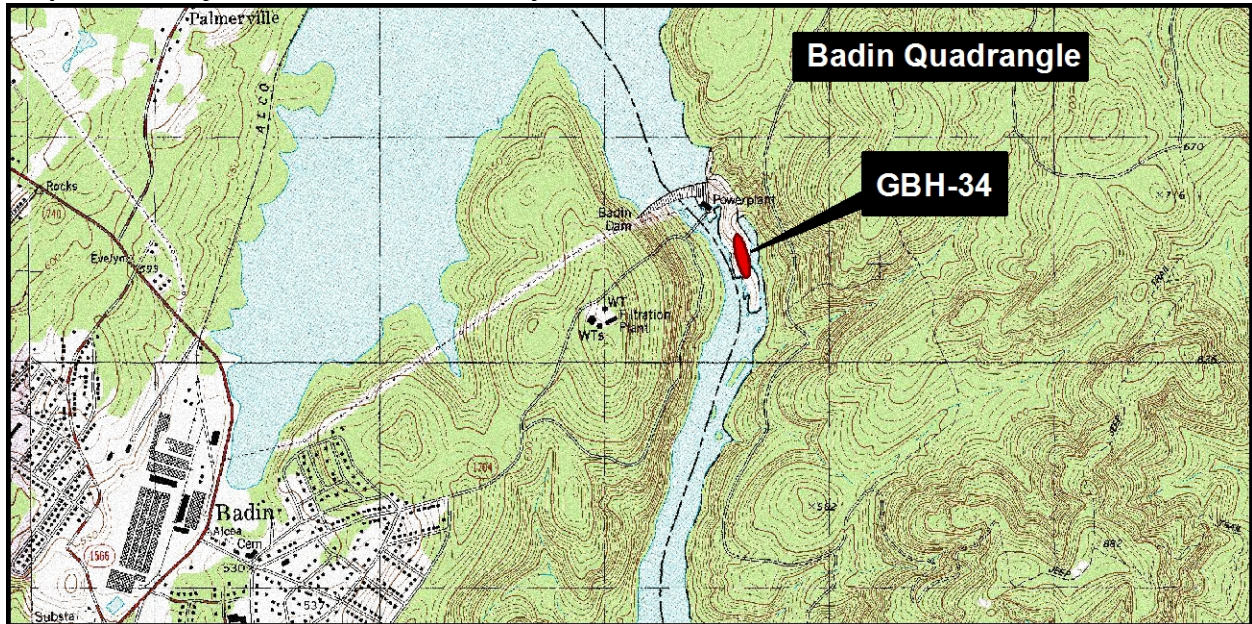
One active Great Blue Heron colony were present on the upper section of Falls Reservoir, directly below the dam. GBH-34 the colony that was located on rocky peninsula on the east shoreline just below the dam found to be active in 2022 with 3 nests.

Code	County	Topo Quad	Pairs
GBH-34	Montgomery	Badin	3 GBHE

### GBH-34 Colony Description

This Great Blue Heron colony is located on a small, rocky, sparsely forested peninsula directly below Badin Dam, on the east shoreline. On 29 March 2022, 3 heron pairs were observed nesting.

### *Map location of Great Blue Heron colony GBH-34*





***Aerial picture of Great Blue Heron colony GBH-34 (photo 2017, B. Paxton).***



### Bald Eagle nest summary (2001-2011).

Nest Code	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
DA-01-01	1 chick	2 chicks	1 chick	Not used	Not used	Absent	Absent	Absent	2 chicks	2 chicks	2 chicks
ST-01-01	2 chicks	Not used	Not used	Not used	Absent	Absent	Absent	Absent	Absent	Absent	Absent
ST-01-02	Not used	Not used	Not used	Not used	Not used	Absent	Absent	Absent	Absent	Absent	Absent
RO-02-01		Lost/storm	Absent	Absent	Absent	Absent	Absent	Absent	Rebuilt	Not used	Absent
RO-02-02		0 chicks	1 chick	1 chick	2 chicks	2 chicks	3 chicks	0 chicks	Not used	Not used	Absent
MO-03-01			1 chick	1 chick	1 chick	Not used	2 chicks	2 chicks	2 chicks	2 chicks	1 chick
RO-04-01				2 chicks	2 chicks	0 chicks	2 chicks	Absent	Absent	Absent	Absent
MO-06-01						Not used	Not used	Absent	Absent	Absent	Absent
DA-07-01							0 chicks	Absent	Absent	Absent	Absent
ST-07-01							2 chicks	Not used	Not used	Absent	Absent
RO-08-01								Not used	Not used	Not used	Not used
DA-08-01								0 chicks	Not used	Absent	Absent
DA-08-02								0 chicks	Not used	Absent	Absent
ST-08-01								0 chicks	0 chicks	Not used	Not used
DA-09-01									1 chick	0 chicks	0 chicks
DA-10-01										2 chicks	3 chicks
RO-10-01										0 chicks	0 chicks
ST-10-01										0 chicks	2 chicks
MO-11-01											Not used



## Bald Eagle nest summary (2012-2022).

Nest Code	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
DA-01-01	2 chicks	2 chicks	3 chicks	1 chick	2 chicks	0 Chicks	0 Chicks	Absent	Absent	Absent	Absent
ST-01-01	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
ST-01-02	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
RO-02-01	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
RO-02-02	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
MO-03-01	0 chicks	2 chicks	2 chicks	2 chicks	2 chicks	2 Chicks	3 chicks	1 Chick	3 Chicks	Absent	Absent
RO-04-01	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
MO-06-01	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
DA-07-01	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
ST-07-01	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
RO-08-01	Not used	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
DA-08-01	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
DA-08-02	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
ST-08-01	Remnant	GHOW	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
DA-09-01	1 chick	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
DA-10-01	0 chicks	3 chicks	1 chick	0 chicks	0 chicks	2 Chicks	0 chicks	Remnant	Absent	Absent	Absent
RO-10-01	2 chicks	2 chicks	1 chick	2 chicks	2 chicks	≥1 Chick	2 chicks	2 Chicks	Inactive	Inactive	2 Chicks
ST-10-01	1 or 2 chicks	2 chicks	2 chicks	2 chicks	2 chicks	Damaged	Remnant	Absent	Absent	Absent	Absent
MO-11-01	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
ST-12-01	2 chicks	3 chicks	2 chicks	2 chicks	3 chicks	3 Chicks	3 Chicks	3 Chicks	3 Chicks	2 Chicks	1 Chick
MO-13-01		1 chick	1 chick	3 chicks	Remnant	Absent	Absent	Absent	Absent	Absent	Absent
MO-13-02		2 chicks	2 chicks	0 chicks	Absent	Absent	Absent	Absent	Absent	Absent	Absent
DA-17-01						2 Chicks	2 Chicks	2 Chicks	2 Chicks	1 Chicks	1 Chick
DA-17-02						Inactive	Remnant	Remnant	Remnant	Absent	Absent
DA-17-03						2 Chicks	2 Chicks	Occupied	Remnant	Absent	Absent
RO-17-01						Inactive	Inactive	2 Chicks	2 Chicks	2 Chicks	2 Chicks
MO-17-01						2 Chicks	Inactive	Absent	Absent	Absent	Absent
MO-17-02						2 Chicks	Remnant	Remnant	Absent	Absent	Absent
RO-18-01							≥1 Chick	Absent	Absent	Absent	Absent
MO-18-01							0 chicks	Inactive	Inactive	Damaged	Absent
MO-18-02							Inactive	Absent	Absent	Absent	Absent
MO-18-03							1 chick	2 Chicks	Remnant	Absent	Absent
DA-19-01								2 Chicks	3 Chicks	Absent	Absent
DA-19-02								2 Chicks	1 Chick	Remnant	2 Chicks
DA-19-03								3 Chicks	Inactive	Inactive	2 Chicks
MO-19-01								Inactive	Inactive	Remnant	Remnant
DA-20-01									0-Failed	Absent	2 Chicks
DA-20-02									2 Chicks	3 Chicks	Inactive
DA-20-03									3 Chicks	2 Chicks	2 Chicks
RO-20-01									1 Chick	Absent	Active
ST-20-01									3 Chicks	2 Chicks	2 Chicks

**Bald Eagle nest summary (2012-2022) continued.**

Nest Code	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
DA-21-01										1 Chick	Inactive
RO-21-01										Inactive	Active
RO-21-02										Inactive	2 Chicks
ST-22-01											Occupied
ST-22-02											3 Chicks



**Recent Great Blue Heron (GBHE)/Great Egret (GREG) and Double-crested Cormorant (DCCO) colony summary (high count in first or second flight, 2013-2022)**

Colony Code	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
GBH-01	35 GBHE	26 GBHE	25 GBHE	26 GBHE	22 GBHE	20 GBHE	40 GBHE, DCCO Roost	35 GBHE, DCCO Roost	20 GBHE, DCCO Roost	25 GBHE, DCCO Roost
GBH-02	210 GBHE, 63 GREG	85 GBHE	145 GBHE, 42 GREG	102 GBHE, 41 GREG	110 GBHE, 40 GREG	110 GBHE, 45 GREG	80 GBHE, 80 GREG	80 GBHE, 70 GREG	100 GBHE, 75 GREG	120 GBHE, 80 GREG
GBH-03	5 GBHE	0	0	0	0	5 GBHE	8 GBHE	6 GBHE	4 GBHE	4 GBHE
GBH-04	220 GBHE, 45 GREG	45 GBHE, 1 GREG	95 GBHE, 23 GREG	55 GBHE, 19 GREG	65 GBHE, 15 GREG	70 GBHE, 20 GREG	60 GBHE, 25 GREG	70 GBHE, 40 GREG	65 GBHE, 3 GREG	100 GBHE
GBH-05	165 GBHE, 1 GREG	125 GBHE	95 GBHE	105 GBHE	140 GBHE	150 GBHE	200 GBHE	220 GBHE	250 GBHE	225 GBHE, 400 DCCO
GBH-06	42 GBHE	37 GBHE	45 GBHE	42 GBHE	50 GBHE	50 GBHE	50 GBHE, DCCO Roost	50 GBHE, DCCO Roost	45 GBHE, DCCO Roost	45 GBHE, DCCO Roost
GBH-07	45 GBHE	15 GBHE	24 GBHE	22 GBHE	22 GBHE	12 GBHE	0	8 GBHE, DCCO Roost	8 GBHE, DCCO Roost	5 GBHE, DCCO Roost
GBH-08	12 GBHE, 155 DCCO	2 GBHE	2 GBHE, 90 DCCO	24 GBHE, 65 DCCO	4 GBHE	8 GBHE, 45 DCCO	10 GBHE, 80 DCCO	12 GBHE, 120 DCCO	25 GBHE, 75 DCCO	100 DCCO
GBH-10	35 GBHE	8 GBHE	0	0	0	0	3 GBHE	3 GBHE	3 GBHE	0
GBH-11	35 GBHE	24 GBHE	27 GBHE	26 GBHE	26 GBHE	25 GBHE	35 GBHE	32 GBHE	35 GBHE	30 GBHE
GBH-13	Colony abandoned	Colony abandoned	Colony abandoned	Colony abandoned	Colony abandoned	Colony abandoned	Colony abandoned	Colony abandoned	Colony abandoned	Colony abandoned
GBH-14	25 GBHE	6 GBHE	4 GBHE, 100 DCCO	35 GBHE, 80 DCCO	20 GBHE, 90 DCCO	40 GBHE, 125 DCCO	20 GBHE, 225 DCCO	20 GBHE, 200 DCCO	15 GBHE, 225 DCCO	2 GBHE, 15 DCCO
GBH-15	8 GBHE	0	0	4 GBHE	6 GBHE	6 GBHE	18 GBHE	9 GBHE	20 GBHE	24 GBHE
GBH-16	26 GBHE	6 GBHE	8 GBHE	8 GBHE	8 GBHE	7 GBHE	16 GBHE	15 GBHE	15 GBHE	2 GBHE
GBH-17	24 GBHE	11 GBHE	15 GBHE	13 GBHE	16 GBHE	0	1 GBHE	1 GBHE	0 GBHE	1 GBHE
GBH-21	5 GBHE	4 GBHE	2 GBHE	2 GBHE	0	7 GBHE	10 GBHE	12 GBHE	10 GBHE	3 GBHE
GBH-22	23 GBHE, 8 DCCO	12 GBHE	10 GBHE, 80 DCCO	8 GBHE, 105 DCCO	12 GBHE, 90 DCCO	20 GBHE	3 GBHE	12 GBHE	20 GBHE	15 GBHE, 1 GREG
GBH-23	4 GBHE	5 GBHE	5 GBHE	7 GBHE	8 GBHE	12 GBHE	10 GBHE	16 GBHE	20 GBHE	2 GBHE
GBH-24	3 GBHE	9 GBHE	14 GBHE	15 GBHE	20 GBHE	15 GBHE	0	0	0 GBHE	0
GBH-25	10 GBHE	0	0	0	0	0	8 GBHE	7 GBHE	0 GBHE	5 GBHE
GBH-26	11 GBHE	4 GBHE	5 GBHE	3 GBHE	2 GBHE	10 GBHE	0	1 GBHE	0 GBHE	0
GBH-27	16 GBHE	65 GBHE	62 GBHE	70 GBHE	45 GBHE	30 GBHE	30 GBHE	0	0 GBHE	0
GBH-28		2 GBHE	0	0	0	0	0	0	0 GBHE	0
GBH-29		10 GBHE	3 GBHE	0	2 GBHE	8 GBHE	6 GBHE	5 GBHE	5 GBHE	2 GBHE
GBH-30				2 GBHE	5 GBHE	8 GBHE	28 GBHE	12 GBHE	22 GBHE	30 GBHE
GBH-31				3 GBHE	0	5 GBHE	3 GBHE	2 GBHE	0 GBHE	0
GBH-32				2 GBHE	2 GBHE	5 GBHE	12 GBHE	2 GBHE	6 GBHE	6 GBHE
GBH-33					12 GBHE	10 GBHE	0	20 GBHE	20 GBHE	10 GBHE
GBH-34					6 GBHE	6 GBHE	6 GBHE	0	0 GBHE	3 GBHE

**Recent Great Blue Heron (GBHE)/Great Egret (GREG) and Double-crested Cormorant (DCCO) colony summary (high count in first or second flight, 2013-2022) continued.**

Colony Code	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
GBH-35						15 GBHE	10 GBHE	8 GBHE	0 GBHE	1 GBHE
GBH-36							12 GBHE	0	0 GBHE	0
GBH-37							16 GBHE	30 GBHE	25 GBHE	35 GBHE
GBH-38							8 GBHE	14 GBHE	35 GBHE	20 GBHE
GBH-39							15 GBHE	18 GBHE	15 GBHE	25 GBHE
GBH-40								8 GBHE	25 GBHE	25GBHE
GBH-41								12 GBHE	10 GBHE	8 GBHE
GBH-42								15 GBHE	0 GBHE	0
GBH-43								5 GBHE	1 GBHE	3 GBHE
GBH-44								5 GBHE	2 GBHE	0
GBH-45										8 GBHE
GBH-46										4 GBHE
GBH-47										3 GBHE



**Historic Great Blue Heron (GBHE)/Great Egret (GREG) and Double-crested Cormorant (DCCO) colony summary (high count in first or second flight, 2001-2012)**

Colony Code	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
GBH-01	11 GBHE	21 GBHE	43 GBHE	43 GBHE	44 GBHE	48 GBHE	54 GBHE, 1 GREG	52 GBHE	57 GBHE	43 GBHE	56 GBHE	29 GBHE
GBH-02	425 GBHE	480 GBHE	310 GBHE	440 GBHE, 15 GREG	380 GBHE, 15 GREG	320 GBHE, 2 GREG	340 GBHE, 26 GREG	380 GBHE, 32 GREG	270 GBHE, 28 GREG	255 GBHE, 38 GREG	240 GBHE, 48 GREG	240 GBHE, 55 GREG
GBH-03	5 GBHE	21 GBHE	38 GBHE	33 GBHE	52 GBHE	55 GBHE	73 GBHE	75 GBHE	87 GBHE	92 GBHE	58 GBHE	7 GBHE
GBH-04	7 GBHE	19 GBHE	60 GBHE	75 GBHE	90 GBHE	83 GBHE	95 GBHE	135 GBHE	158 GBHE, 3 GREG	145 GBHE, 19 GREG	180 GBHE, 22 GREG	215 GBHE, 18 GREG
GBH-05	150 GBHE	140 GBHE	185 GBHE	110 GBHE	180 GBHE	145 GBHE	180 GBHE	220 GBHE	195 GBHE, 2 GREG	225 GBHE, 7 GREG	185 GBHE, 5 GREG	185 GBHE, 5 GREG
GBH-06		5 GBHE	45 GBHE	44 GBHE	52 GBHE	73 GBHE	68 GBHE	59 GBHE	55 GBHE	58 GBHE	55 GBHE	48 GBHE, 3 GREG
GBH-07		1 GBHE	1 GBHE	4 GBHE	8 GBHE	8 GBHE	34 GBHE	34 GBHE	42 GBHE	48 GBHE	42 GBHE	45 GBHE
GBH-08				8 GBHE	38 GBHE	63 GBHE	58 GBHE	76 GBHE	82 GBHE	75 GBHE, 32 DCCO	95 GBHE, 83 DCCO	25 GBHE, 215 DCCO
GBH-10					6 GBHE	6 GBHE	10 GBHE	0	0	0	0	26 GBHE
GBH-11					4 GBHE	5 GBHE	8 GBHE	12 GBHE	16 GBHE	17 GBHE	28 GBHE	31 GBHE, 2 GREG
GBH-13								8 GBHE	7 GBHE	3 GBHE	6 GBHE	5 GBHE
GBH-14									21 GBHE	18 GBHE	10 GBHE	22 GBHE
GBH-15										6 GBHE	6 GBHE	12 GBHE
GBH-16										10 GBHE	12 GBHE	18 GBHE
GBH-17												18 GBHE
GBH-21												7 GBHE
GBH-22												12 GBHE