

**North Carolina Sandhills Conservation Partnership Working Group Updates
September 14, 2016**

Resource Management Working Group

No activity.

Communications Working Group

No report received.

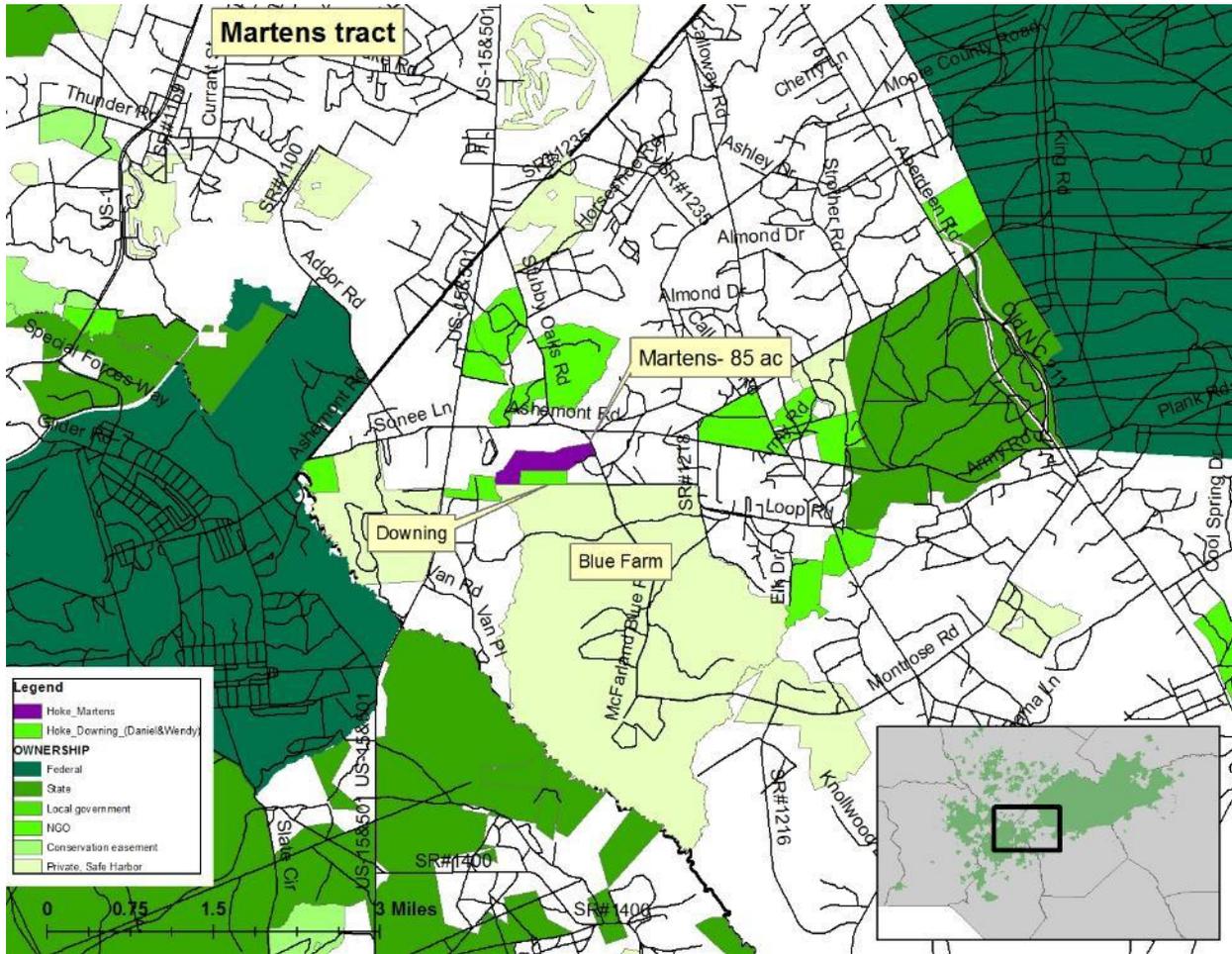
Reserve Design Working Group

- 1). Scott Pohlman and Allison Weekley conducted longleaf habitat surveys in stands that Mike Shafale had identified as potential longleaf upland habitat. They reviewed 31 potential areas, 13 of which were natural area candidate sites. Their recommendations included two potential new natural areas, and two expansions of existing natural areas. They also found five new occurrences of a rare plant (*Carex austrodeflexa*), and will provide information to NHP for approximately 14 new natural community occurrences. Members of this group will complete all remaining upland area surveys by the end of 2016.
- 2). There was discussion about whether there is a need to update the existing layers of the Reserve Design Plan. Currently, the RCW and Natural Heritage layers are being updated. When the potential upland habitat surveys are completed, the restoration and natural heritage candidate layers can also be updated. In 2018 the group will consider updating the smoke awareness, wildlife connector, and specialist and generalist habitat guild layers.
- 3). NFWF will require each longleaf partnership across the range to map regions where they will focus on restoring and improving longleaf. The Longleaf Alliance would like this completed by October, however they would like North Carolina to complete their analysis by late August, so we can serve as a model for other regions.
- 4). The group reviewed the summary of the responses to the related survey (46 responses from 18 individuals and/or organization representatives) and did some drill-down to help in prioritizing research needs. In summary, the focus of the recommended research topics was on fire management and other factors impacting, and resulting from, longleaf pine forest preservation efforts. The group plans to share results with potential researchers, including those at NCSU, the Fire Exchange, and other forestry organizations for potential interest.

Land Protection Working Group

From June 15, 2016 through September 14, 2016 TNC closed on the 85 acre Martens tract. This tract is adjacent to the recently purchased Danny Downing tract and immediately north of the Blue Farm.

SALT, WRC, and TNC have several projects in process.



Red-cockaded Woodpecker (RCW) Recovery Working Group

The RCW Recovery Working Group convened in January and June of 2016 to discuss important emerging issues relating to (1) management of RCW foraging partitions that span multiple property owners and (2) silvicultural practices within nesting and foraging habitat across Partner lands in the North Carolina Sandhills and (3) management of Safe Harbor properties supporting RCW groups and similar properties that have potential for future RCW recruitment.

The Sandhills East Primary Core RCW population reached its population goal of 350 potential breeding groups (PBGs) in 2005. Population monitoring has documented an increase of PBGs between 2005 and 2015 of 368 (347 on Fort Bragg (FB), 21 on Partnership lands) to 454 (431 on FB, 23 on Partnership lands). A similar rate of increase, from 134 (13 on Camp Mackall (MACK) and 121 on Sandhills Game Land (SGL)) to 167 PBGs (14 on MACK, 153 on SGL), was observed in the last decade within the Sandhills West Essential Support RCW Population, excluding private property.

RCW foraging and nesting habitat in Primary Core, Secondary Core, Essential Support Populations and in cooperating ownerships being managed as part of a recovery population are to be managed according to the *RCW Recovery Standard (RS)* (USFWS RCW Recovery Plan, Second Revision, 2003). RCW habitat on private lands that have no role in recovery have lower habitat requirements than the RS (i.e., *Standard for Managed Stability (SMS)*). The RS requires at least 120 acres depending on the silvicultural regime being practiced and the SMS requires at least 75 acres of contiguous habitat preferably within 0.25 miles of the cluster center.

RCW Foraging Habitat and Partitions

An RCW foraging partition is a 0.50 mile radius around a cluster center (total area 502.65 acres assuming that there are no other clusters within one mile). RCW Foraging Habitat Matrix analyses were run to

determine the number of foraging partitions for existing RCW groups on Fort Bragg and Camp Mackall that would exceed, meet or fall short of the RS (i.e. at least 120 acres of good quality habitat). Of particular interest was the influence of non-federal neighboring RCW groups and their overlapping foraging partitions which decrease foraging habitat allotted to managed RCW groups located on Fort Bragg and Camp Mackall. Analysis of 558 designated Fort Bragg and Camp Mackall foraging partitions found that 107 (19%) cross onto non-federal neighboring lands (reference attached map).

Sandhills East /Fort Bragg (99 partitions):

Fifty-six (56) partitions of 99 meet or exceed 120 contiguous acres of pine habitat on Fort Bragg, whereas 41 partitions contain less than 120 contiguous acres of pine habitat on Fort Bragg and consequently are deficient in meeting the RS foraging guidelines solely on federal property; 2 partitions are equal to 120 acres. Twenty-five (25) of these 41 partitions occur on private lands where the NC Sandhills Conservation Partnership (NCSCP) has limited to no access or influence on land management and 16 occur on NCSCP (including Safe Harbor) lands. Only 4 of these 16 partitions have adequate acres on NCSCP lands to meet or exceed the RS. Ten (10) foraging partitions (3 state-owned and 7 private) from clusters on properties adjacent to Fort Bragg extend onto the federal installations.

Sandhills West /Camp Mackall (8 partitions):

Six (6) of 8 partitions meet 120 contiguous acres of pine habitat on Camp Mackall; two partitions are deficit of RS, 1 with adjacent to SGL and 1 with no adjacent NCSCP land. Six non-federal partitions extend onto Camp Mackall from adjacent SGL B-Block.

Based on the information presented above, the RCW Working Group recommends the following actions:

- If habitat on NCSCP or other private lands is essential to meeting habitat goals for clusters (partitions) located on Fort Bragg, every effort should be made to coordinate management and habitat removals on applicable ownerships in order to ensure that quality RCW habitat is available in perpetuity.
- Likewise, if essential foraging habitat for non-federal clusters occurs on Fort Bragg, the installation should work with the appropriate landowner(s) to ensure that its habitat management enhances and perpetuates necessary quality habitat.

Silviculture affecting RCW Nesting and Foraging Habitat

As the pine forest has matured, RCW populations on Fort Bragg, SGL and some other Partner lands have increased, with population density doubling in some areas. As a result, foraging partition size per group has decreased. In some cases, partitions no longer meet either the 120 recovery or 75 SMS or incidental take thresholds. As partition size shrinks, the amount of timber available for removal at any one time also decreases. For partitions of less than 75 acres, any removal of pines ≥ 10 inches in diameter breast height may trigger incidental take. USFWS needs to establish a science based protocol for determining when a PBG counts towards a population goal. What are the consequences of incidental 'take' relative to counting habitat deficient clusters towards the population goal?

Due to foraging habitat limitations imposed by population growth mentioned previously, it is essential to retain the majority of old pines on the landscape, while allowing for some regeneration. Pine basal area has been reduced up to 60% on Partner lands in several recent single entry thinning operations. RCW population growth will cease and declines are likely if large acreage harvests that remove one-half or more of the existing pine overstory basal area continue.

USFWS guidance for silvicultural practices and forest management activities within and near RCW clusters are as follows:

- Prohibit use of heavy machinery and vehicles within 50 feet of cavity trees.
- Construct no new roads or trails through clusters.
- Maintain continuous forest cover around clusters in order to minimize high wind damage to cavity trees. Avoid establishment of openings (i.e. logging decks) adjacent to the cluster.
- Avoid and discourage operations which result in deep soil scarification and irreparable damage to native ground cover and communities. Research found recovery of ground cover following selective harvest of longleaf pine can take 50 years in deep sandy soils (Provencher *et al.* 1997, 1998). There is no evidence that natural ground cover diversity can be restored after severe soil disturbance regardless of time.

- Conduct pre-harvest foraging habitat analyses for partitions with active RCW clusters in order to determine appropriate pine basal area removal. Recognize that current group densities are reliant on existing stocking within pine stands; removal of significant pine basal area in acreage-constrained partitions will likely result in future PBG destabilization and population declines.
- **Refer to 8J. Guidelines: Silviculture (USFWS 2003) for specifics on Good Quality Foraging Habitat** Good quality habitat includes maintaining a significant number of large, old pines, low densities of small and medium sized pines, sparse or absent hardwood midstory and abundant, diverse native grasses and forbs (Hardesty *et al.* 1997 James *et al.* 1997, 2001, Hedrick *et al.* 1998, Walters *et al.* 2000).
- Acres that do not meet the definition of good quality habitat do not count toward the minimum of 120 acres of good quality habitat.

Method	Rotation (Longleaf)	Regeneration Acreage Limit per Entry	Acreage of Pine Required	Notes
Two- aged	120 - 150 years	< 25 - < 40	200 - 240	120 acres must be good quality habitat
Group * Selection	None	< 2 ac patches	150	100 acres must be good quality habitat
Single tree * Selection	None	Single tree	120	ALL acres must be good quality habitat
Silviculture Guidelines - USFWS RCW Recovery Plan, Second Revision 2003				
* Group and single tree selection produce uneven-aged forests that will produce and maintain good quality RCW habitat and conform to ecosystem management as it pertains to longleaf pine communities.				

Managing RCW nesting and foraging habitat within Safe Harbor lands

- USFWS needs to work with landowners to assure compliance of Safe Harbor Agreements, Section 7 Biological Opinions and management plans. Some progress has been made towards these goals in recent months.