

Forestry Information Summary on Federal T&E Species

Species: Eastern Black Rail (a ground-nesting, wetland bird), *Laterallus jamaicensis jamaicensis*.

Federal Listing Status: Threatened. Effective Date: November 9, 2020.

Federal Register Notice: Vol. 85, No.196, pg.50610-50630, publ. October 8, 2020.

Habitat Type: Marsh wetlands with dense cover of emergent vegetation and shallow water.

Stressors: Habitat loss; destruction of nests or birds.

Breeding Season: Approximately MAR/APR through AUG/SEP.

Affected NCFS Districts: D4, D7, D8, D13.

Critical Habitat Designation: None.

FAQ: www.fws.gov/southeast/faq/eastern-black-rail-final-4d-rule/

Contact: USF&WS Manteo Office: 252-473-1131.

The Eastern Black Rail is a wetland/marsh-dependent bird requiring a dense layer of emergent vegetation and extremely shallow water depths (typically less than 3 cm deep, or about 1-inch) over a portion of the wetland/upland interface. The bird also uses the transition zone (ecotone) between emergent wetlands and upland grasslands to provide refuge during floods/high water. In North Carolina, this species is most often associated with coastal wetland marshes.

Regulatory Requirements for Prescribed Fire

- This bird is protected under the Endangered Species Act (ESA).
- There is a “4(d)-Rule” for the Eastern Black Rail. That rule includes limits and required BMPs for using prescribed fire, in order to remain exempted from permitting in the event that an “incidental take” occurs. See pages 2 and 3.

Forest Management Operations Considerations:

- Section 404 of the Clean Water Act includes [15 federally-required BMPs](#) for roads and skid trails in wetlands and waters of the U.S., and one of those BMPs says:
“The discharge shall not take, or jeopardize the continued existence of, a threatened or endangered species as defined under the Endangered Species Act, or adversely modify or destroy the critical habitat of such species.”
- When preparing forestry plans, it is recommended to reference the Critical Habitat map viewer and make the landowner aware if their tract contains or adjoins Critical Habitat, to raise the level of awareness and reinforce the importance of protecting water quality.

Forest Protection / Fire Control Operations Considerations:

The NCFS and USFS operate under the authority of a fireline discharge permit with the USACE:

- Permit Condition: *“No activity is authorized under this general permit which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species.....or which will directly or indirectly destroy or adversely modify the critical habitat of such species.”*

DISCLAIMER: This information summary is only intended for awareness and education purposes. This is not a full description of all applicable regulations and does not constitute legal advice. Consult with the U.S. Fish and Wildlife Service for clarifications regarding how a forestry activity can comply with the Endangered Species Act: www.fws.gov/raleigh.

Use of Prescribed Fire

While fire is needed for the maintenance of this bird's habitat, the timing and frequency of the burns, as well as the specific vegetation types targeted, can lead to undesirable effects, such as:

- × Burning salt marshes during drought or while the marshes are not flooded can result in root damage to valuable cover plants.
- × Burning of organic/peat soil when marshes are dry has resulted in marsh conversion to open water due to the loss of peat soils.

The Forestry 4(d)-Rule for Eastern Black Rail

Part 1 – Prohibitions, Related to Forestry

The following activities with the Eastern Black Rail are prohibited:

“Incidental take” resulting from the following activities:

- [A] Prescribed burn activities, unless BMPs are used to minimize negative effects of the fire, including:
- 1) Regardless of the size of the area under management with prescribed fire, a broad range of habitat conditions should be maintained by burning on a rotational basis. In any given calendar year, at least 50% of the Eastern Black Rail habitat within the management boundary should be maintained in order to provide the dense overhead cover required.
[NOTE: Management boundaries can include individual landholdings (such as a National Wildlife Refuge boundary), or be formed through landscape-level agreements across landholdings of different but contiguous ownerships. This 50% threshold does not apply to landholdings smaller than 640 acres.]
 - 2) Where Eastern Black Rail are present, use prescribed fire tactics that provide unburned refugia/cover allowing birds to survive a fire (such as using short flanking, backing fires, or similar approaches). Apply prescribed fire when fuel and weather conditions (soil moisture and/or relative humidity) are most likely to result in patchy persistence of unburned habitat to serve as refugia/cover from fire and predators.
 - 3) Ignition tactics, rates of spread, and flame lengths should allow for wildlife escape routes to avoid trapping birds in a fire. The application of prescribed fire should avoid fires, such as ring and strip head fires, that have long, unbroken boundaries and/or that come together in a short period of time and that consume essentially all vegetation and prevent black rails from escaping a fire. If aerial ignition is the chosen tool, ignitions should be conducted in such a way that large, fast-moving fires are avoided.
- [B] Mowing, haying, and other mechanical treatment activities in persistent emergent wetlands when the activity occurs during the nesting or brooding periods, except as allowed under Part 2(A), below.

The 4(d)-Rule for Eastern Black Rail {continued}

Part 2 - Exceptions from Prohibitions, Related to Forestry

- Incidental take resulting from haying, mowing, or other mechanical treatment activities in persistent emergent wetlands that occur during the nesting and brooding periods is allowed if those activities:
 - [A] Are maintenance requirements to ensure safety and operational needs, including maintaining existing infrastructure such as firebreaks, roads, rights-of-way, levees, dikes, fence lines, airfields, and surface water irrigation infrastructure (e.g., head gates, ditches, canals, water control structures, and culverts); or,
 - [B] Occur during the control of woody encroachment and other invasive plant species to restore degraded habitat.
- Incidental take resulting from actions taken to control wildfires is allowed.
- Incidental take resulting from the establishment of new firebreaks (for example, to protect wildlands or manmade infrastructure) and new fence lines is allowed.
- Incidental take resulting from prescribed burns, grazing, and mowing or other mechanical treatment activities in existing moist soil management units or prior converted croplands (e.g., impoundments for rice or other cereal grain production) is allowed.

Background Information

Fall and winter burns are less likely to have detrimental impacts during the bird's breeding season.

Coastal marshes that are burned in staggered rotations to create a mosaic of different seral stages or are burned less frequently are preferred.

Eastern Black Rails can survive fires that slowly advance, so the birds can move ahead of the flames and where areas of unburned refugia/cover are available.

Refugia/cover can include wetter areas with emergent vegetation, areas with natural or created firebreaks, or areas not conducive to burning (e.g., wet or green areas in a burn unit).

Prescribed fires with large, fast-moving flame fronts and lines of fire merging into each other may result in trapping Eastern Black Rails that may be killed directly by fire or indirectly through asphyxiation.

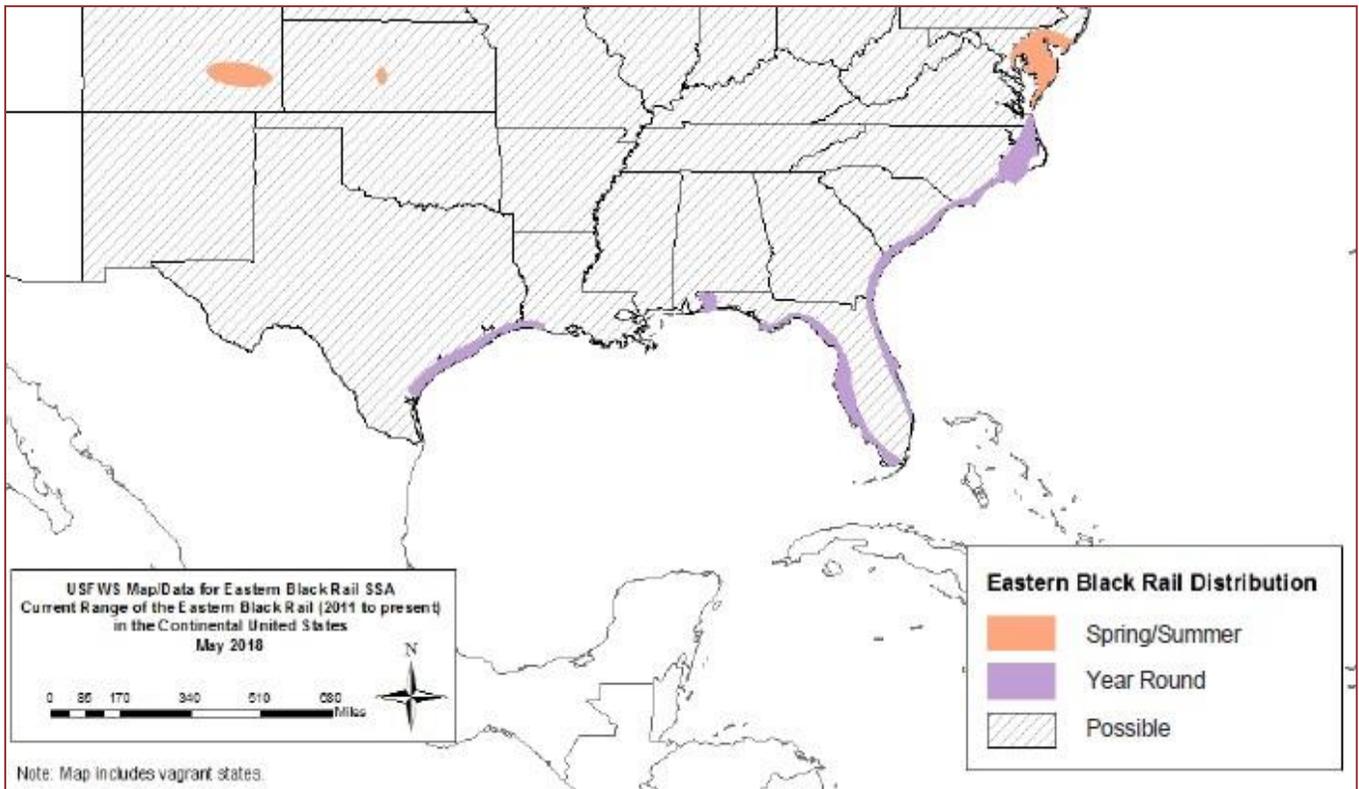
For example, in Florida, a mosaic of unburned vegetation patches (refugia) 0.1 to 2.0-acres in size facilitated bird survival during a 1,600-acre controlled burn during the late summer, whereas a controlled burn of a 2,400-acre marsh during the winter resulted in direct mortality of 34 Eastern Black Rails when refugia/cover areas were not provided.

See photo and map on next page from USFWS.



LEFT: This photo shows Eastern Black Rail habitat in coastal South Carolina, taken from the USF&WS Species Status Assessment report, Figure 2-5, page 21.

BELOW: Distribution map taken from the USF&WS Species Status Assessment report, Figure 2-6, page 24.



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