

Three-toed woodpecker

Picoides tridactylus

Status

Federal status: G5 N5, Not listed

NH state status: S1, Threatened

ME state status: S3, Special Concern

Population trends are largely unknown. It is believed to be localized, occurring in pockets across the range, but not common anywhere. Low densities and habits make this species difficult to detect and monitor. One study indicates it is declining in Maine.

Expert panel gave range-wide and Forest outcomes of B now and in the next 20 years. The panel indicated that the status of this woodpecker may improve in the near-future off-Forest and is probably stable on the WMNF.

Distribution

In North America, this species ranges from the northern limit of trees in Canada southward to southern Oregon, Idaho, New Mexico and northern Arizona, Minnesota, southern Ontario, the Adirondack Mts. of New York, extreme northeastern Vermont, and northern New Hampshire and Maine. In Eurasia it occurs from tree line in the north, southward to southern Scandinavia, Latvia, and parts of Russia. In addition, isolated populations occur in mountainous regions of Europe and Asia. It is mostly resident throughout its breeding range, but often winters at lower elevations or just outside the breeding range.

In New Hampshire, it has been documented throughout the White Mountains and in Lancaster, Jefferson, Pittsburg, and Errol. Occurrences have not been tracked in Maine, but it occurs in the northern portion of the state. A majority of the known locations in New Hampshire are in the WMNF.

Habitat

The three-toed woodpecker inhabits montane coniferous forests and the boreal forest zone of the entire Northern Hemisphere. This woodpecker depends on large stands of dead and dying conifers resulting from disease, fire, flooding, and storms. It may prefer flooded or swampy areas for nest sites in the eastern U.S. and areas disturbed by fire in the western U.S. In eastern North America, this species is found at approximately 360 m (1200 ft.) to 1,250 m (4100 ft.) elevation.

Nest cavities are excavated in trees and snags of about 25-30 cm (10-12 inches) in northern New England. Three-toed woodpeckers are often found near forest edges, especially aquatic terrestrial edges, where snags and damaged trees are prevalent. They appear to prefer mature to old growth forests, however may use younger forests when suitable nest trees and forage are available. Optimum habitat has areas with 42-52 snags per 100 acres, with snags occurring in clumps. They use both hard and soft snags. Nests typically are 1.5 to 15 m (5-50 feet) above ground.

Limiting Factors

The primary limiting factors for this species range-wide are habitat destruction and degradation. They prefer mature to old growth coniferous montane forest habitat. Extensive and intensive logging have reduced the amount of mature forest, reduced snag levels, and resulted in conversion of some areas to unsuitable hardwood forest. They may also be harmed by forest fragmentation as demonstrated by studies that indicate they are more likely to occur in larger areas of virgin forest vs. smaller patches.

Removal of damaged or dying trees and snags during timber harvest or following natural disturbance or insect outbreaks deprives these woodpeckers of suitable nest trees and important foraging habitat. This species relies on ephemeral habitats that result primarily from natural disturbance. Anything that reduces the natural disturbance regime, such as fire suppression or spraying, limits suitable habitat that might be created naturally.

Viability concern

Experts on the bird panel suspect this species is viable and stable, but they were not sure, especially given the difficulty in monitoring a species that naturally occurs at low densities and uses ephemeral habitats. Loss of mature forest and snags, and conversion of spruce-fir forest to hardwoods are still concerns in northern New England. On the WMNF, habitat loss and degradation occurred historically. In recent years, the forest has been allowed to age and develop decay and snags, but it takes time for mature coniferous forest conditions and large snags to return to a landscape. The WMNF has a concentration of the New Hampshire populations because it is where habitat is available. Therefore, this species was identified as of viability concern because the future of suitable habitat on the Forest could determine the viability of this species at the state level. Also, no other species on the SVE list has a similar dependence on snags, cavities, and decaying trees, so the needs of this species would not be addressed by any other species on the SVE list.

Management activities that might affect viability

Clearcutting and other regeneration harvest practices in coniferous forest can remove suitable breeding habitat if no provisions are made for the retention of suitable snags. Extensive regeneration harvest on a landscape could reduce habitat enough to affect viability. However small amounts of clearcutting in a primarily mature forest landscape should not affect viability, especially if snags and dying trees are kept since this species is known to use edge and even open habitats where snags and dying trees occur.

There is nothing to indicate that selection harvest or other activities that create small openings in the mature forest canopy would reduce habitat suitability as long as snags and dying trees are retained on the landscape.

Harvest or other activities that result in conversion of spruce-fir habitat to other forest types or non-forest conditions remove suitable breeding habitat and could affect viability if they alter a substantial portion of the landscape.

Alteration of the natural disturbance regimes that create suitable breeding habitat could affect viability in the long-term. This could include fire suppression, spraying to prevent insect outbreaks, and harvest to produce a forest with limited disease and decay.

References

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