Bicknell's thrush

Status

Federal status: G4 N4B, Not listed
NH state status: S2S3B, Not listed
ME state status: S3B, Special Concern

Bicknell's thrush is protected by federal law under the Migratory Bird Treaty Act. It was a former C2 candidate for listing with U.S. Fish and Wildlife Service. Currently recognized as one of the most at-risk passerines in eastern North America. Partners in Flight ranks Bicknell's thrush as the top conservation priority among Nearctic-Neotropical migrants in the Northeast. Classified as vulnerable by the International Union for the Conservation of Nature. The Committee on the Status of Endangered Wildlife in Canada lists the status of Bicknell's thrush as Special Concern. Northeast Technical Group species of concern due to risk of disappearing from the Northeast.

Population is estimated at less than 100,000 individuals in the U.S. breeding range. It is relatively abundant at high elevations within the WMNF. There is limited information available on population changes. While local extirpations have been documented during the 20th century, no clear evidence exists for a rangewide decline.

The expert panel indicated that the current outcome across the range and on the WMNF is B. There is concern about the winter range, but not enough information to estimate what is happening there. Over the next 20 years outcome rangewide is B changing to C. This is due to potential ski area and trail development, increased use by recreationists, and the development of windpower. On the WMNF, outcomes are also expected to change from B to C due to increased human use.

Distribution

The breeding range of Bicknell's thrush is limited and fragmented. Breeding is documented in Canada in southern Quebec and the Magdalen Islands, northwestern and north-central New Brunswick, Cape Breton Island, and Nova Scotia. Southern breeding limits are reached in the Catskill Mountains of New York, the Green Mountains of southern Vermont, the White Mountains of central New Hampshire, and the mountains of western and central Maine. Unconfirmed local and sporadic breeding has been documented in north-coastal Maine.

In winter Bicknell's thrush appears to be confined to the Greater Antilles. Most wintering birds occur in the Dominican Republic. There are a few records from Haiti; it is uncommon in Jamaica and eastern and southeastern Puerto Rico, and has been recorded in eastern Cuba.

In New Hampshire, it is common in the high elevations of the White Mountains.

Habitat

Breeding habitat is high elevation forest of spruce, fir, birch, and krummolz communites. Frequently found in highly disturbed areas undergoing rapid succession. Highest densities found in constantly disturbed locations such as exposed high elevation ridges

vegetated with dense stunted balsam fir and along the edges of human created openings or in regenerating balsam fir. Bicknell's thrush will use newly regenerating clearcuts. In the northeastern U.S., habitat for this species is typically located above 2800 feet elevation, although this can vary by location.

This habitat is naturally rare. An elevation based model of thrush habitat (conifer-dominated montane) in the U.S. indicates about 275,000 acres of potentially suitable conifer-dominated montane forest habitat located in New Hampshire (45%), Maine (23%), Adirondack Mountains, NY (23%), Green and Taconic Mountains, VT (8%), and Catskill Mountains, NY (1%).

On its Greater Antilles wintering grounds, Bicknell's thrush is largely restricted to moist, primary broadleaf forests.

Limiting Factors

Loss of wintering habitat due to deforestation appears to pose the greatest threat to the species' long-term viability. There also was a decline in high elevation forests in the northeastern U.S. during the 1960's and 1970's. Red spruce dieback was especially pronounced, much of it from naturally occurring fir waves. Atmospheric deposition is a likely causal factor in this decline. Global climate change may exert profound, long-term impacts on balsam fir forests.

Development of high elevation forests for recreational and commercial uses contributes to habitat reduction and fragmentation. Skiing and mountain biking are prevalent in northern New England. Ski runs reduce the amount of suitable habitat, although ski areas can be managed to provide suitable habitat between runs. Increased summer use of ski areas and potential expansions are of concern. However, Bicknell's thrush can probably tolerate some degree of human disturbance. Telecommunication towers on mountaintops and development of wind generation facilities may further fragment montane breeding habitat and introduce disturbance from construction and servicing activities.

In addition, extreme weather can cause nesting failures.

Viability concern

The WMNF manages a large portion of available habitat in the species' global range. Bicknell's thrush is a RFSS species, and viability is expected to decline due to increased recreational use in its habitat.

Management activities that might affect populations or viability

Vegetation management and recreational development can have both negative and positive affects for this species. While alpine ski area development can reduce habitat, maintenance of low fir-spruce thickets in 9 to 22 foot wide bands of gradually increasing height along ski trails can provide nesting and foraging sites. Vegetation management can be planned to improve habitat or reduce harmful impacts in the breeding range. Bicknell's thrush has been known to use newly regenerating clearcuts. High densities have been found in constantly disturbed locations including edges of human created openings or in regenerating balsam fir.

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