



Clark's Nutcracker caches pine seeds for eating later, but they don't relocate every last one. The nationally Endangered Whitebark Pine relies on this species' forgotten caches for seed dispersal.

Clark's Nutcracker

(Nucifraga columbiana)

STATUS

SARA
Alberta **NO STATUS SENSITIVE**

British Columbia **YELLOW**
Saskatchewan **ABSENT**

PRIMARY HABITAT

Semi-open/mountains/conifer

TERRITORY SIZE

100–300 ha or larger

NEST TYPE

Canopy (conifer)

NEST REUSE

Unknown

STAND LEVEL

Selective cutting followed by prescribed burn to promote open whitebark/limber pine stands

LANDSCAPE LEVEL

Whitebark pine stands >10 ha with >1,000 cones/ha are essential habitat

BREEDING WINDOW



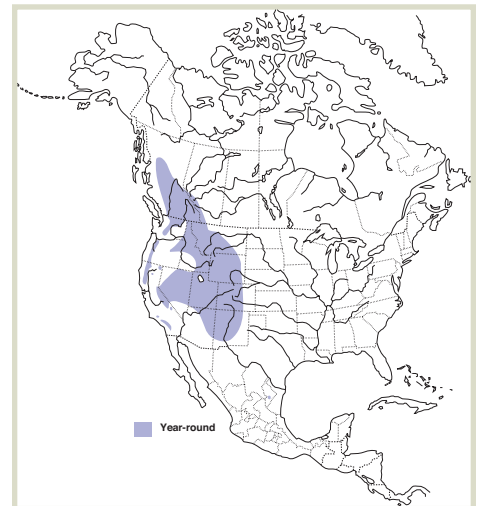
HABITAT ECOLOGY

- Clark's Nutcracker occupies semi-open montane and subalpine coniferous forests dominated by ponderosa pine, Douglas fir, limber pine, and/or whitebark pine.¹
- It is a resident species that is found mainly in subalpine forests in the spring and summer, moving down to montane forests in the late autumn, although these movements are not consistent among all populations.^{1,2}
- Clark's Nutcracker is rarely found at altitudes higher than 2,600 m.¹
- This species breeds as early as January, with peak breeding from early February to late May. This means that standard avoidance techniques may be ineffective for reducing incidental take.¹

RESPONSE TO FOREST MANAGEMENT

- Clark's Nutcracker is highly threatened by tree mortality and reduced cone production resulting from mountain pine beetle outbreaks and whitebark pine blister rust.³
 - Fire suppression in the Rocky Mountains has made whitebark pine more vulnerable to these threats.¹
- Recent clearcuts may be used for seed caching, as well as recent openings caused by burns.⁴

RANGE MAP



STAND-LEVEL RECOMMENDATIONS

- This species requires ≥ 10 ha whitebark pine stands with an average cone density of $\geq 1,000$ cones/ha.⁵ The following actions are recommended where these stands, or stands nearly meeting these conditions, are identified:
 - In collaboration with provincial land managers, prescribed burning at a location within 10 km of the stand can create habitat for caching.⁵
 - Planting of rust-resistant whitebark pine seedlings in stands that approach but do not meet this threshold.⁵
- Thinning treatments targeting non-whitebark pine species, followed by prescribed burning, may create caching habitats. The effectiveness of this approach has been mixed and it should be undertaken with caution.^{6,7}