

The Yellow-bellied Sapsucker can be detected by its double "tap-tap" drumming and their distinctive meow-like call.

## HABITAT ECOLOGY

- The Yellow-belled Sapsucker is considered a keystone excavator of forest habitats since a large number of bird and mammal species reuse its old cavities, and many other feed on the sapwells they drill on deciduous trees (including the Rufous Hummingbird).<sup>1</sup>
- Typical nesting and foraging habitat for this species includes trembling aspen and paper birch, including mixed conifer-deciduous forests.<sup>1</sup> It is found in a wide range of forest age classes including early-seral forests that contain large, old trees suitable for nesting.<sup>2</sup>
  - Their preferred nest trees are similar to those of Northern Flickers and Pileated Woodpeckers: large-diameter live deciduous trees with heart rot (mainly aspen >35 cm dbh with 10–25 false tinder conks). Their nests are typically found in clumps of 25–30 trees >12 cm dbh.<sup>3</sup>
  - Foraging habitat includes birch, willow, white spruce and aspen.3 Birch poles are preferred where available and alder is used where there are low birch densities.<sup>4</sup>
  - Nest trees may be reused for 6–7 years, and some reuse of old cavity nests has been observed.<sup>1</sup>
- In northern BC, Yellow-bellied Sapsuckers were observed almost entirely in upland aspen/poplar/white spruce mixedwood and pure deciduous forests older than 60 years (predominantly in forests older than 90 years). This preference for older stands was attributed to higher densities of nest trees and white birch poles.<sup>4</sup>

## RESPONSE TO FOREST MANAGEMENT

- Yellow-bellied Sapsuckers are resilient to harvests leaving residual structure and/or adjacent unharvested remnants in which they can nest, but they decrease substantially in clearcuts.<sup>2,5,6</sup>
- This species was not, however, likely to occur in regenerating clearcuts up to 33 years postharvest, suggesting potential long-term negative impacts of extensive harvest without residual structure.<sup>7</sup>
- Large, aggregated harvests will support more sapsuckers than recently-burned forests,<sup>8</sup> but fewer sapsuckers than mature and old aspen and mixedwood stands.<sup>3</sup>
- Retention harvests may make nesting sapsuckers more vulnerable to predation by black bears if optimal nest trees (see Habitat Ecology) are selectively removed, leaving sapsuckers to nest in less protected trees (e.g., trees left unharvested due to substantial decay). Note: this study was conducted in American Beech forests in Ontario<sup>9</sup>. Local research is recommended, however unsuccessful black bear nest predation attempts have been observed in Alberta.<sup>10</sup>

# Yellow-bellied Sapsucker

## (Sphyrapicus varius)

STATUS SARA Alberta

NO STATUS SECURE

PRIMARY HABITAT Deciduous/mixedwood

Aspen trees >35 cm dbh with false

NEST TYPE Cavity (deciduous)

## STAND LEVEL



JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT

## RANGE MAP

British Columbia

Saskatchewan

**TERRITORY SIZE** 

NEST REUSE

LANDSCAPE LEVEL

High (up to 6–7 years)

Unharvested deciduous or mixed

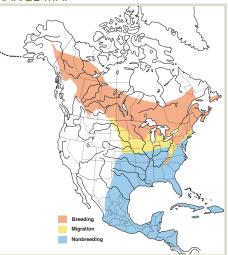
2-3 ha

YELLOW

NO STATUS

DEC

NOV



#### STAND-LEVEL RECOMMENDATIONS

- Large aggregated harvests containing retention patches >5 ha, with many patches >15 ha and some patches >100 ha, are recommended as better alternatives to two-pass clearcutting. Larger patches containing both merchantable and non-merchantable trees are desired, and smaller patches should contain mature or old aspen/mixedwood. Smaller patches that provide foraging habitat are also recommended (see below).<sup>3,6</sup>
- Smaller patches containing foraging features (see below) may also improve habitat value provided they are <60 m from unharvested areas larger than 5 ha (e.g., riparian buffers, remnants) that contain high densities of known or potential nest trees.<sup>3,6</sup>
- Retention patch anchor points to provide **nesting habitat** include clumps of potential or known nest trees (see Habitat Ecology) surrounded by clumps of trees >12 cm dbh.<sup>3</sup> If possible, >15 living cavity trees per hectare (on average) are recommended to ensure the highest-quality trees can be selected.<sup>9</sup>
- Retention patch anchor points to provide **foraging habitat** include clumps of pole stage or younger white birch, provided there are nearby patches or unharvested forest containing suitable nesting habitat. Where white birch is absent, alder, willow, and aspen saplings should be retained.<sup>3,10</sup>
  - Careful communication between harvest and reforestation operators is encouraged to ensure that retained clumps of young trees and shrubs are not damaged during mechanical site preparation.<sup>10</sup>
- In harvest areas optimized for Yellow-bellied Sapsucker, post-harvest silviculture that reduces white birch and alder densities should be avoided if possible.<sup>4</sup>