



Objectives:

- 1) To significantly reduce harvest activity impacts (felling & skidding) during the critical spring nesting period while maintaining summer fibre supply flows.
- 2) To address the impacts of forest operations during critical spring nesting periods, given the current absence of provincial government policy.
- 3) To avoid conflicts with the primary period of annual nesting activity and peak seasonal population, recognizing that complete elimination of all impact at an individual nest or bird level is unfeasible.
- 4) To limit activity stressors and potential nest abandonment.

NOTE:

- Applicable to **ALL** forest/site timber retrieval operations **between the 3rd Week of April and Mid-July**.
- Applicable to operations on Crown land and Private land.

Background:

Legislation, corporate stewardship, and professional ethics collectively demand that mitigation strategies be employed to limit the impacts of forest operations on both **protected** and **non-protected** bird species during the critical nesting period. DMI recognizes “**nesting activity**” as the period from the point-of-nest-establishment, through fledgling proximity-use of the nest site (home basing) to post-natal dispersal of the immature birds. Legislation around **protected species** generally prohibits impacts to nesting birds and their residences during the nesting and rearing period (Migratory Birds Act, Species at Risk, Wildlife Act/Regulation). The negligent disruption of **non-protected** species during this period represents a risk to corporate stewardship reputation and is of questionable ethical and professional performance.

There is significant local avifauna species diversity (approx 246 species), and annual temporal fluctuations in populations present within DMI’s geographic sphere of interest. The company has conducted an evaluation of habitat associations, nesting locations (i.e. canopy position), and general season of presence for those bird species documented to occur in northern Alberta. Approximately 136 species of avifauna are associated with three distinct, broad vegetation areas or upland forest habitat-types that form DMI’s primary areas of operation, (deciduous dominant stands, mixed wood stands and fringe-agricultural area stands). The largest portion of these 136 species actively nests between the 3rd week of April and mid-July¹. After this time, an otherwise widely spread population distribution shifts to seeing high activity concentration focused along forest edges (agricultural fringe areas). Some species are present year-round or only outside the spring/summer season. However, this period forms the peak exposure for species diversity, population density and nesting activity locally and therefore provides a good start-point for mitigative forest activity measures.

Given current sampling techniques, high seasonal density of local avifauna and difficulty in nest visibility, there appears to be little feasibility in attempting to survey, locate, and effectively avoid the wide variety of nest types, nest sizes, and nesting locations (vertical position) that might be present in the average forest stand during this peak exposure period. As a result, the best course of action is the development of a **temporal avoidance strategy**. In early 2005, federal and provincial biologists were consulted to verify information assumptions (local avifauna ecology), and to discuss the efficacy of an avoidance strategy in light of DMI’s intent to mitigate the impacts of their operations on avifauna species during the critical nesting period.

¹ Various biologist consultations by DMI since 1998 have consistently indicated that summer operation delays to early August were preferred. A 2005 DMI evaluation of temporal aspects on northern Alberta avifauna species provided consistent findings to that historical advice. During 2005, federal biologist consultation (CWS, Environment Canada) indicated “mid-July” as a less preferable but acceptable (earliest) start-up time.





The *nesting-impact avoidance strategy* developed by DMI is based on two broad assumptions:

- 1) Felling and skidder forwarding during the critical nesting period represent a significant risk of disturbance to avifauna species and
- 2) Chipping (log-processing stage), operations represent little to no measurable impact on nesting activity and species under certain controls.

Based on these assumptions, DMI developed a Sour-felling strategy which would allow the company to maintain vital summer fibre supply flows while reducing harvest activity conflicts with the primary period of annual nesting activity and peak seasonal population.

“Sour-felling” refers to a strategy to conduct advance-felling operations (Stage 1), on private land and/or crown land timber sites prior to the primary temporal influx of bird species to this region (operations halt by the 3rd week of April). Only Log processing (Stage 2), of skidded logs occurs after that date. Since second stage activity **occurs during nesting activity period**, the objective is to significantly restrict travel locations during this operation period. Birds establishing in low-brush and ground sites in the skidded areas following the time of first stage activity should largely be undisturbed.

With regard to wetland proximity species, the application of existing ground rules and riparian buffering normally assists in addressing potential impacts to those species as well as a number of other biota that associate with riparian areas.

ACTION	VERIFICATION / NOTES
<p><u>Felling and Skidding</u> DMI has <u>no intention to conduct normal felling/skidding operations</u> during the peak exposure periods of nesting and fledgling activity.</p>	<ul style="list-style-type: none"> • Harvesting operations (felling & skidder forwarding), will be avoided between the 3rd week of April and mid-July.
<p><u>Chipping (log-processing stage)</u> Such operations represent little to no measurable impact on nesting activity and species.</p>	<ul style="list-style-type: none"> • Avoid placement of chippers within proximity to preserved raptor-nest locations during active nesting season.
<p><u>Sour-felling</u> STAGE 1 Felling and Skidder Forwarding</p> <ul style="list-style-type: none"> • early spring, or late winter 	<ul style="list-style-type: none"> • Focus felling operations <u>prior to</u> arrival of the primary conflict or risk-period (i.e. early spring, or late winter). • Immediately forward (skid) the felled logs as close as possible to designated concentrated decking locations (landings) for later processing by portable-chippers scheduled to arrive when other decked volume sources are exhausted. • Avoid placement of log-deck locations within proximity to preserved raptor-nest locations (prevention of future activity stressors & potential nest abandonment)
<p><u>Sour-felling</u> STAGE 2 - Log Retrieval, Chipping and Hog Fuel Treatment</p> <ul style="list-style-type: none"> • after the 3rd week of April (occurs during nesting activity period) 	<ul style="list-style-type: none"> • Ensure skidder travel is restricted to the localized deck accumulation areas and roading during the return 2nd-stage visit to each site with the portable-chipping processors. • Hog fuel will be treated by late-fall burning or processing for removal from such sites, <ul style="list-style-type: none"> ○ The normal practice of distributing “Hog fuel” by-products (biomass) to the cutover area is NOT desirable for potential ground-nesting species. • All other 2nd-stage activity is restricted to designated temporary road-routes within the site.





REVISION HISTORY

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APPROVAL:

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