

# Rimu mast status and what it means for the kākāpō breeding season

Summary as of 12 December 2025 (Pacific/Auckland context)

Kākāpō breeding is tightly linked to rimu (*Dacrydium cupressinum*) mast events: when rimu trees set and ripen large amounts of fruit, female kākāpō are much more likely to nest, and more chicks can be successfully raised. Current monitoring indicates an unusually strong rimu fruiting signal heading into the 2025/26 season, which sets the stage for a potentially large breeding year in 2026.<sup>1,2</sup>

## Key numbers at a glance

Kākāpō population (official DOC count)	237 birds alive <sup>3</sup>
Breeding trigger (rimu fruiting)	>10% of rimu branch tips bearing fruit <sup>1</sup>
Forecast rimu fruiting for 2026 (DOC monitoring)	Around 50-60% fruiting across breeding islands <sup>1</sup>
Breeding-age females (DOC 2025 planning figure)	About 87 females (potentially nearly all could nest) <sup>1</sup>

## What the rimu situation looks like right now

DOC and research partners use summer temperature patterns to forecast rimu mast events up to two years ahead, and then confirm the forecast closer to the season by sampling rimu branches and counting the proportion of tips with fruit set.<sup>1</sup> In late 2025, reporting indicates that fruit set on rimu branches is “extraordinarily high,” which is the kind of cue that kākāpō appear to detect before they begin courtship behaviour.<sup>2</sup>

For the 2026 breeding season in particular, DOC’s latest island sampling and modelling points to record-high rimu fruiting predictions of roughly 50-60% fruiting across the three main breeding islands (Whenua Hou/Codfish Island, Anchor Island, and Hauturu-o-Toi/Little Barrier Island).<sup>1</sup>

Important uncertainty: strong fruit set is a very good sign, but the breeding outcome can still be affected if fruit fails to ripen or if extreme weather disrupts food availability during incubation and chick-rearing.<sup>2</sup>

## Why rimu mast matters so much to kākāpō

- Food supply: rimu fruit provides a seasonal, high-energy food source that helps females meet the costs of laying and raising chicks.
- Breeding switch: kākāpō are more likely to breed when rimu fruiting crosses a threshold; DOC notes breeding can occur when more than 10% of rimu tips bear fruit, and participation increases as fruiting increases.<sup>1</sup>

- Timing: the fruit needs to be available when chicks hatch and grow, so the birds' breeding calendar is tuned to the rimu cycle.<sup>2</sup>
- Population growth bottleneck: because mast years are intermittent, each successful breeding season is disproportionately important for rebuilding numbers and genetic diversity.

## What this means for the upcoming breeding season

If the high rimu fruiting levels hold through ripening, kākāpō recovery teams expect a large share of breeding-age females to nest, with the potential for near-universal nesting among roughly 87 breeding-age females used in DOC planning scenarios.<sup>1</sup> RNZ reporting also notes there are now many more females of breeding age than in the 1990s, which magnifies the impact of a mast year.<sup>4</sup>

### Season timeline (typical windows)

Period	What happens	Why it matters
Dec–Jan	Males “boom” at leks; matings recorded	Determines which birds breed and informs management decisions
Feb–Mar	Eggs laid; incubation and early nest management	Highest risk phase; egg viability and nest safety are critical
Mar–May	Hatching and chick growth monitoring	Food availability and health support drive survival rates
Apr–Jun	Fledging	Chicks become independent enough to survive without intensive support
Sep–Oct (following year)	Young are counted as independent juveniles	They are added to the official population tally when independent. <sup>2</sup>

### Operational implications (what managers are likely doing)

DOC's breeding-season preparations include staffing up on the breeding islands, maintaining power and data infrastructure, supplementary feeding to bring some birds into breeding condition, tracking matings via transmitters, and nest monitoring. Vulnerable eggs or chicks may be incubated or hand-reared if needed, with specialist care available on the mainland.<sup>1</sup>

A notable shift underway is a move toward more sustainable, lower-intervention management as the population grows—accepting some additional risk to reduce the long-term intensity of hands-on management and focus on creating more space and safer habitats.<sup>4</sup>

## **What it means beyond this season**

A large breeding season is excellent news, but it also increases pressure on habitat capacity: the existing predator-free sites are finite, so recovery plans increasingly emphasise expanding safe habitat and reducing introduced predators in potential future release areas.<sup>2,4</sup>

If you're following along as a supporter, the key thing to watch over the next few months is whether the rimu crop continues to ripen and persist through the peak nesting and chick-rearing period. Weather-driven fruit failure is one of the main reasons a promising season can under-deliver.<sup>2</sup>

## Sources

1. Department of Conservation (DOC). (27 June 2025). Kākāpō breeding season 2026 (Conservation blog). [blog.doc.govt.nz/2025/06/27/kakapo-breeding-season-2026/](https://blog.doc.govt.nz/2025/06/27/kakapo-breeding-season-2026/)
2. University of Auckland. (3 December 2025). Bumper breeding season for kākāpō on the cards. [auckland.ac.nz/en/news/2025/12/03/bumper-breeding-season-for-kakapo-on-the-cards.html](https://auckland.ac.nz/en/news/2025/12/03/bumper-breeding-season-for-kakapo-on-the-cards.html)
3. Department of Conservation (DOC). Kākāpō and Kākāpō Recovery webpages (population count “237 alive today”), accessed 12 December 2025. [doc.govt.nz/nature/native-animals/birds/birds-a-z/kakapo/](https://doc.govt.nz/nature/native-animals/birds/birds-a-z/kakapo/) ; [doc.govt.nz/our-work/kakapo-recovery/](https://doc.govt.nz/our-work/kakapo-recovery/)
4. Radio New Zealand (RNZ). (20 November 2025). Kākāpō might not be the bird of the year, but this is the year of the kākāpō. [rnz.co.nz/news/national/579420/kakapo-might-not-be-the-bird-of-the-year-but-this-is-the-year-of-the-kakapo](https://rnz.co.nz/news/national/579420/kakapo-might-not-be-the-bird-of-the-year-but-this-is-the-year-of-the-kakapo)

Notes: This summary is informational and reflects public reporting and DOC planning signals available as of the date above. Exact outcomes depend on fruit ripening, weather, health events, and on-the-ground management decisions.