RAPTOR CONSERVATION IN AUSTRALIA

Australia’s Raptors: Conservation Without a Count

A policy-focused presentation on monitoring gaps, Red List indicators, and why weak population data limits conservation action

Prepared presentation

Charity Social and NATURAL PROJECT

THESIS

The problem is not only habitat loss - it is uncertainty

We cannot manage a decline well if we cannot count it well.

1 Raptors are difficult to monitor

Low densities
Huge territories
Remote habitat
Secretive nesting

2 Government action is fragmented

Federal EPBC Act
State/territory laws
NGO/academic monitoring
Indigenous ranger surveys

3 Indicators show risk, not certainty

IUCN categories
Population estimates
Trend estimates
Uncertain baselines

Core message

A credible conservation strategy needs repeatable national monitoring, not only species listings and isolated projects.

A fair criticism: there are plans, but weak accountability

The useful question is not “does the government care?” It is “can the system prove recovery?”

Australia’s official framework includes the EPBC Act, conservation advice, recovery plans, and the Threatened Species Action Plan.

But a framework is not the same as a functioning monitoring system. If raptor populations are estimated from scattered surveys, habitat models, or expert judgement, then authorities may know the category of risk without knowing the number of individuals.

POLICY GAP ≠ ZERO ACTION

Sources: DCCEEW Threatened Species Action Plan; ANAO audit of EPBC threatened species management.

Independent audit: the national system was only “partly effective”

The Australian National Audit Office found major weaknesses in implementation, monitoring and reporting.

2%

recovery plans completed within statutory timeframes

940

average days for listing assessments completed in 2020-21

1,944

threatened species listed nationally as of Feb 2022

PARTLY

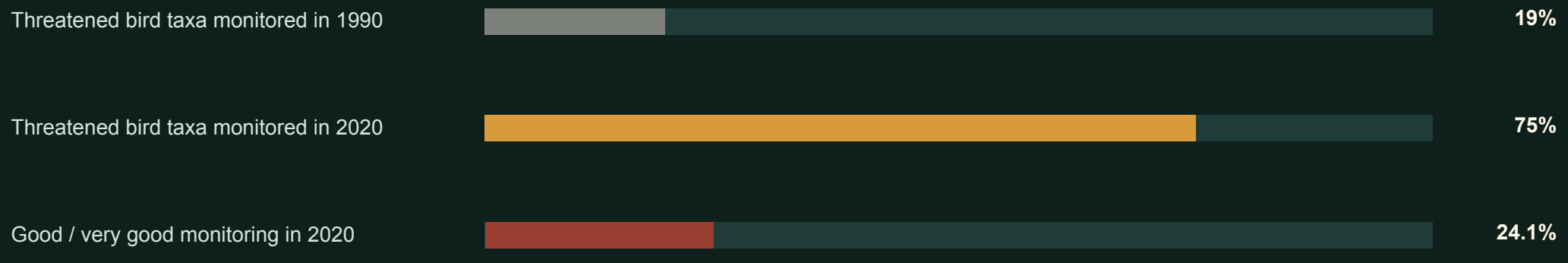
effective EPBC threatened species administration

The audit concluded there was “limited evidence” desired outcomes were being achieved because of a lack of monitoring, reporting and support for implementation.

Source: Australian National Audit Office, Management of Threatened Species and Ecological Communities under the EPBC Act, 2022.

Threatened birds are better monitored than before - but quality remains low

A recent review found improvement since 1990, yet only about a quarter of threatened bird taxa had good or very good monitoring by 2020.



Interpretation

Coverage has improved, but many programs still lack the frequency, geographic coverage, or statistical strength needed to detect raptor trends with confidence.

Source: Trends in monitoring of Australia's threatened birds, 1990-2020.

IUCN-style indicators: useful, but not a national census

The Red List gives a risk language: category, trend, mature individuals, fragmentation, and threat pressure.

Indicator	What it tells us	What it may not tell us
Category	Relative extinction risk	Exact national abundance
Trend	Direction of change	Rate at local scale
Mature individuals	Approximate breeding population	Precise count of all birds
Threats	Pressure on survival	Effectiveness of action

For policy, IUCN indicators are a warning system. They do not replace repeated, government-backed population surveys.

Sources: BirdLife DataZone / IUCN Red List species factsheets; DCCEEW conservation advice.

SPECIES EVIDENCE

Case study: Red Goshawk - high risk, low certainty

Australia’s rarest bird of prey shows why population estimates matter.

Red Goshawk

EPBC ENDANGERED

Estimated at 1,340 mature individuals in the wild, with a declining trend and one subpopulation spread over a very large area.

Large territories make detection difficult
Northern breeding range and remote habitat complicate repeat surveys
Satellite tracking and ranger programs improve knowledge, but are still not a full national count

Sources: DCCEEW Red Goshawk conservation advice; BirdLife DataZone / IUCN; Australian Geographic/AWC image.

Case study: Grey Falcon - accepted as rare, but trend data are weak

A species can be listed as threatened even when trend data are limited or unavailable.

Grey Falcon

LOW-DENSITY ARID RAPTOR

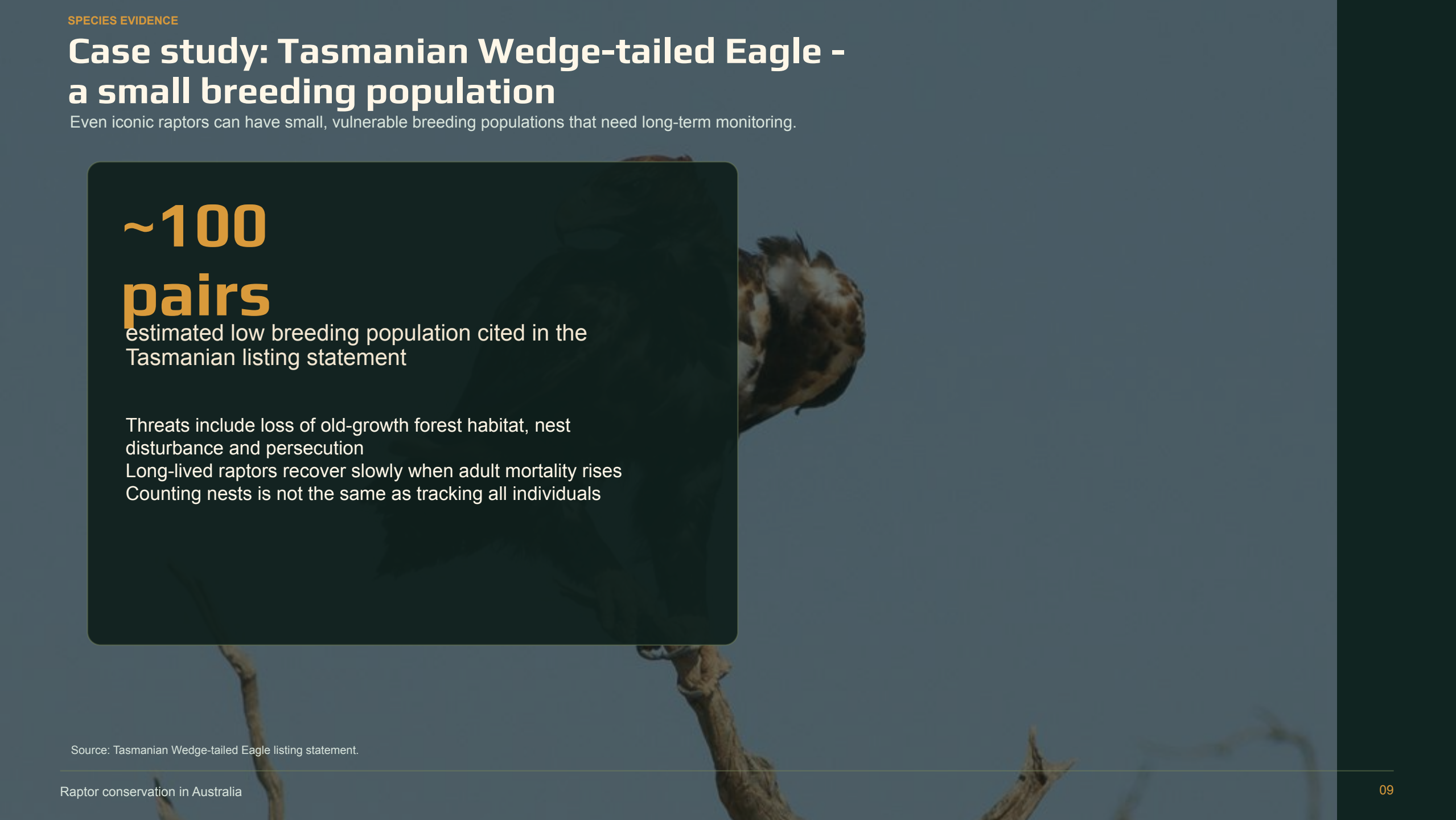
Government conservation advice accepts the total population as fewer than 1,000 mature individuals. The same advice notes no population trend data are available.

This is a perfect example of the “counting gap”: authorities recognise risk, but the population trajectory remains difficult to prove.

Source: Grey Falcon conservation advice.

Case study: Tasmanian Wedge-tailed Eagle - a small breeding population

Even iconic raptors can have small, vulnerable breeding populations that need long-term monitoring.



~100 pairs

estimated low breeding population cited in the Tasmanian listing statement

Threats include loss of old-growth forest habitat, nest disturbance and persecution
Long-lived raptors recover slowly when adult mortality rises
Counting nests is not the same as tracking all individuals

Source: Tasmanian Wedge-tailed Eagle listing statement.

Why weak initiative matters: threats keep moving while data lag

Land clearing, poison exposure and prey decline can operate faster than the monitoring cycle.

When monitoring is weak:

Land clearing can remove nesting trees before surveys detect population response
Rodenticides can kill or weaken raptors through secondary poisoning
Declining prey can reduce breeding success before adult numbers visibly fall
Approvals may proceed under uncertainty

The core risk is “management by delay”: waiting for better evidence while threats continue.

Sources: ANAO audit; DCCEEW threatened bird survey guidelines; Garnett et al. threat-monitoring framework.

SYSTEM GAP

Project-level surveys are not the same as national population monitoring

Australia has survey guidelines, but many are designed for assessment and compliance rather than continuous recovery tracking.

Environmental assessment surveys

Often site-specific
Triggered by development proposals
Detect presence/absence or local habitat use
Useful for approvals, but patchy over time

Recovery monitoring

Repeatable national/regional design
Same methods over many years
Tracks abundance, survival and breeding success
Feeds directly into funding and policy decisions

The missing bridge is an accountable system that turns surveys into population trend evidence.

Source: DCCEEW survey guidelines for Australia's threatened birds.

INITIATIVE GAP

Where government initiative appears insufficient

Four weaknesses recur across threatened-species governance and raptor conservation.

1 Delayed plans

Recovery plans and reviews often miss statutory timeframes.

2 Weak implementation tracking

The national department did not track/support most plans across jurisdictions and partners.

3 Unclear population baselines

Several raptor estimates are ranges, model-derived or based on sparse surveys.

4 Threat approvals under uncertainty

Habitat loss and pesticide exposure may continue before population effects are visible.

Sources: ANAO audit; DCCEEW conservation advice; NSW Audit Office example.

POLICY EXAMPLE

State-level example: conservation activity can be absent even for high-priority species

NSW audit findings show how monitoring and delivery can fail at the implementation level.

69%

of threatened species and ecological communities had no conservation activities, including monitoring, delivered by NSW DCCEEW in 2022-23.

Why include a NSW example?

Raptor conservation is delivered through a federal-state patchwork. Even if national policy recognises risk, implementation frequently depends on state programs, local capacity and long-term funding.

Use carefully: this is a state-level example, not proof that every Australian program fails.

Source: Audit Office of New South Wales, Threatened species and ecological communities, 2024.

DATA GAP

The public often sees risk categories - not the number of birds

For many raptors, authorities can state “threatened” more confidently than “how many exist”.

Species	Official / assessment signal	What the number tells us
Red Goshawk	Endangered; 1,340 mature individuals; declining	Estimate exists, but range-wide surveys remain difficult
Grey Falcon	Vulnerable; <1,000 mature individuals; no trend data available	Risk recognised despite weak trend evidence
Tasmanian Wedge-tailed Eagle	Endangered subspecies; ~100 breeding pairs cited	Nest/pair estimates do not equal total individuals
Powerful Owl	Listed as threatened in several jurisdictions	Urban/regional estimates vary; national trend is difficult

Takeaway: conservation status is not the same as a precise population count.

Sources: DCCEEW species advice; BirdLife DataZone / IUCN species factsheets; Tasmanian listing statement.

Why raptor numbers are difficult - and why that is not an excuse

The scientific difficulty is real. The policy response should be stronger monitoring, not weaker ambition.

Low density	Many species naturally occur at sparse densities.
Large territories	A single pair may use vast areas across land tenures.
Secretive breeding	Nests can be hidden, remote or active only in certain years.
Slow life histories	Population decline may appear first as lower breeding success, not obvious adult loss.

Better monitoring is not just science - it is the foundation for stronger policy.

What a stronger government initiative would look like

A “counting-first” conservation strategy should be visible, repeatable and independently assessable.

1	**National raptor monitoring protocol**	Standard methods for priority species, with state alignment.
2	**Public population dashboard**	Best estimate, uncertainty range, survey year, trend direction.
3	**Funding tied to trend evidence**	Money follows measurable recovery needs, not only emergency attention.
4	**Precautionary land-use rules**	Development approvals respond to uncertainty and cumulative habitat loss.
5	**Rodenticide risk controls**	Reduce secondary poisoning risk through safer pest-management standards.

A practical 5-year roadmap

How Australia could move from estimates to accountable conservation.

Baseline audit

Compile existing surveys, nesting records, recovery plans and known data gaps.

Priority species surveys

Target Red Goshawk, Grey Falcon, Tasmanian Wedge-tailed Eagle and regional owls.

Open dashboard

Publish numbers with uncertainty bands and method notes.

Policy integration

Use trend data in land-clearing, pesticide and wind-energy approvals.

Independent review

Assess whether recovery action changed abundance, breeding success or threat exposure.

Success metric: by the end of five years, priority raptors should have published estimates, confidence ranges, and updated trend classifications.

COUNTERARGUMENTS

What government may say - and how to respond

A strong presentation anticipates objections.

“We already have an Action Plan.”	Yes - but the Action Plan complements existing obligations and does not create new obligations on individuals, organisations or governments.
“Raptors are hard to count.”	Exactly - that is why raptors need dedicated monitoring design and long-term funding.
“There are NGO and academic projects.”	Good - but public conservation should not depend mainly on scattered external projects.
“Budgets are limited.”	Then funding should prioritise species where the current data gap creates the highest risk of silent decline.

Source note: Action Plan language from DCCEEW public plan page.

Conclusion: raptors need more than protection on paper

The conservation gap is visible in the distance between risk recognition and population certainty.

Three takeaways

IUCN / Red List indicators show risk, but do not replace government population counts.
Australia has conservation frameworks, but audits show weak monitoring, reporting and implementation support.
For raptors, uncertainty itself is a threat: delayed action can allow land clearing, poisoning and prey decline to continue unseen.

Final line: if we cannot count the birds of prey, we cannot honestly claim we are recovering them.

Discussion questions

Use these to close the presentation or start a class debate.

1. Should development approvals be more precautionary when raptor population data are weak?

2. Who should be responsible for national raptor monitoring: federal government, states, NGOs, universities, or all together?

3. Should threatened species funding prioritise species with the worst status, or species with the worst data gaps?

4. How can Indigenous ranger knowledge be integrated without extracting knowledge unfairly?

Key references used in this deck

For speaker notes, fact-checking and further reading.

1. Australian National Audit Office (2022). Management of Threatened Species and Ecological Communities under the EPBC Act.

2. DCCEEW (2022). Threatened Species Action Plan 2022-2032 and 110 priority species list.

3. DCCEEW (2023). Conservation Advice: Erythrotriorchis radiatus (Red Goshawk).

4. DCCEEW / state sources. Conservation Advice: Falco hypoleucos (Grey Falcon).

5. Tasmanian Government. Tasmanian Wedge-tailed Eagle listing statement.

6. BirdLife DataZone / IUCN species factsheets for Red Goshawk, Grey Falcon, Powerful Owl and Wedge-tailed Eagle.

7. Audit Office of New South Wales (2024). Threatened species and ecological communities.

8. Garnett et al. (2024). Monitoring threats to Australian threatened birds.

Image credits: Red Goshawk image by Tim Henderson/AWC via Australian Geographic; other raptor/habitat visuals from prior deck assets and generated/royalty-safe assets.

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