



Survey Results of Bird Species Diversity (2019 - 2025)

Overview of Bird Species Diversity Survey

B.Grimm has conducted bird diversity surveys since 2019 across 3 solar power plants, including Lat Krabang, Nong Chok, and Sai Noi, as part of its environmental monitoring and compliance program.

Surveys have been carried out throughout the project lifecycle, covering the construction phase (2018–2019), operational phase (2021–2022), and the latest period (2024–2025). All surveys were conducted during the dry season (November to February), coinciding with Thailand's peak migratory period, and covered both the project areas and a 1-kilometre surrounding buffer zone to capture species presence and habitat use.

Survey Objectives

- Assess the effectiveness of mitigation measures implemented under project-level Biodiversity Action Plans (BAPs)
- Ensure alignment with Asian Development Bank (ADB) Safeguard Policy Statement (SPS)
- Support ongoing biodiversity assessment and trend monitoring
- Contribute to conservation efforts within the Central Basin Important Bird Area (IBA)



Bird Species Diversity Survey Results

The 2025 survey results, reflecting 6 years of continuous operation, indicate that environmental conditions within the project sites support biodiversity, with increases in both abundance and diversity compared to the construction phase. Surrounding land use within a 1-kilometre radius continues to provide suitable habitats for a wide range of species, suggesting minimal impact from operations.

Notably, the survey recorded, for the first time since monitoring began in 2019, a species classified as **Critically Endangered (CR)**, the highest risk category indicating an extremely high risk of extinction in the wild under the IUCN Red List, the Yellow-breasted Bunting (*Emberiza aureola*). This finding underscores the effectiveness of ecosystem-conscious land management and ongoing biodiversity monitoring in avoiding and minimising impacts on natural habitats.



Yellow-breasted Bunting

Yellow-breasted Bunting

Bird Species Diversity Survey Results (cont.)

In addition, comparative data from 2019, 2022, and 2025 show the continued presence of **Near Threatened (NT)** species, including:

- **Spot-billed Pelican**
(*Pelecanus philippensis*),
- **Asian Golden Weaver**
(*Ploceus hypoxanthus*),
- **Oriental Darter**
(*Anhinga melanogaster*), and
- **Red-necked Stint**
(*Calidris ruficollis*)

This reflects stable ecosystem conditions and indicates that B.Grimm Power's operations can coexist with and support suitable habitats.



Spot-billed Pelican



Asian Golden Weaver



Oriental Darter



Red-necked Stint

Other Recorded Bird Species Diversity



Key Insights from Bird Species Diversity Survey

Species composition across selected sites by conservation status

Lat Krabang Site

- Species richness increased (98 to 111), indicating improving habitat suitability.
- **First record of a CR species** highlights growing ecological significance.
- LC species-dominated community indicates stable baseline conditions.
- NT species presence and slight increase reflect sustained ecological functionality, particularly for wetland-dependent species.

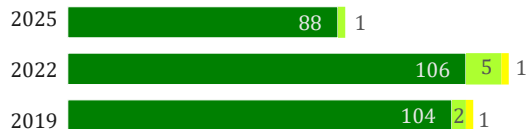
Nong Chok Site

- Species richness declined in 2025; however, no significant conservation concern identified, with stable habitat conditions maintained. Variations likely driven by seasonal factors, migratory timing, detectability limitations, and external influences beyond the project boundary.
- Bird community remains dominated by LC species, with continued presence of NT species, indicating stable baseline conditions and ongoing ecological value

Sai Noi Site

- Decline in species richness observed, remaining below key conservation thresholds and not indicative of ecological concern; variations likely driven by seasonal, migratory, and survey-related factors.
- Community remains dominated by LC species, indicating stable baseline habitat conditions, with changes in NT/VU presence likely reflecting detectability limitations or reduced suitability for more sensitive species.
- Species turnover and seasonal shifts highlight dynamic ecosystem processes within an agricultural, migratory landscape, with broader external factors beyond the project boundary also potentially influencing local bird populations.

Number of Bird Species



The IUCN Red List of Ecosystems Categories

- Critically Endangered (CR)
- Vulnerable (VU)
- Near Threatened (NT)
- Least Concern (LC)

Source:
<https://portals.iucn.org/library/sites/library/files/documents/2016-010-v1.1.pdf>, PDF.16

