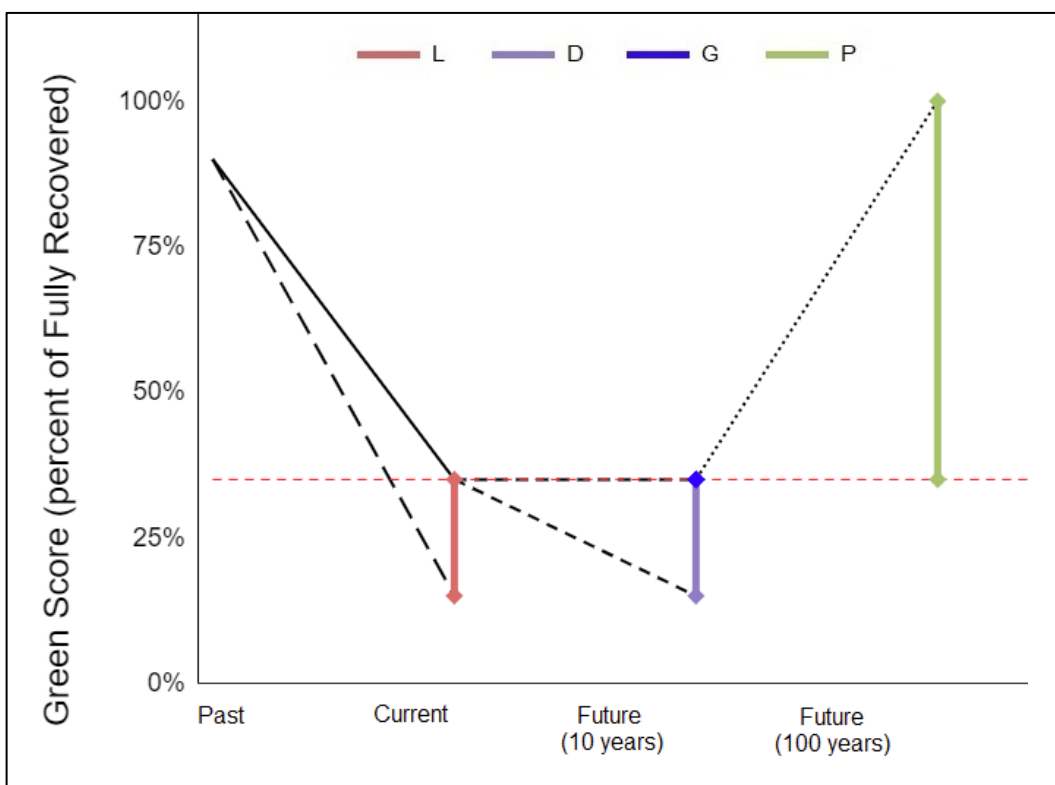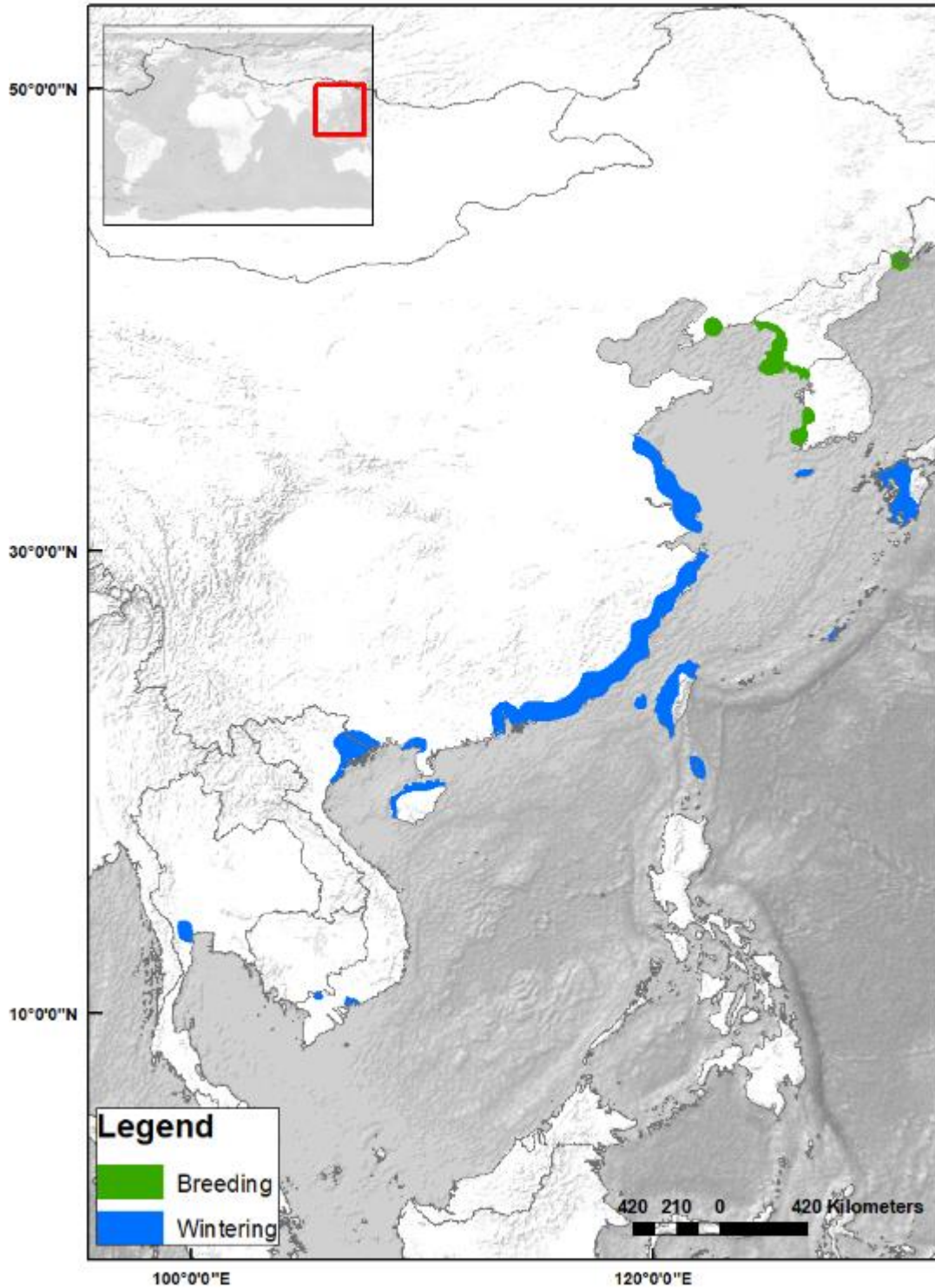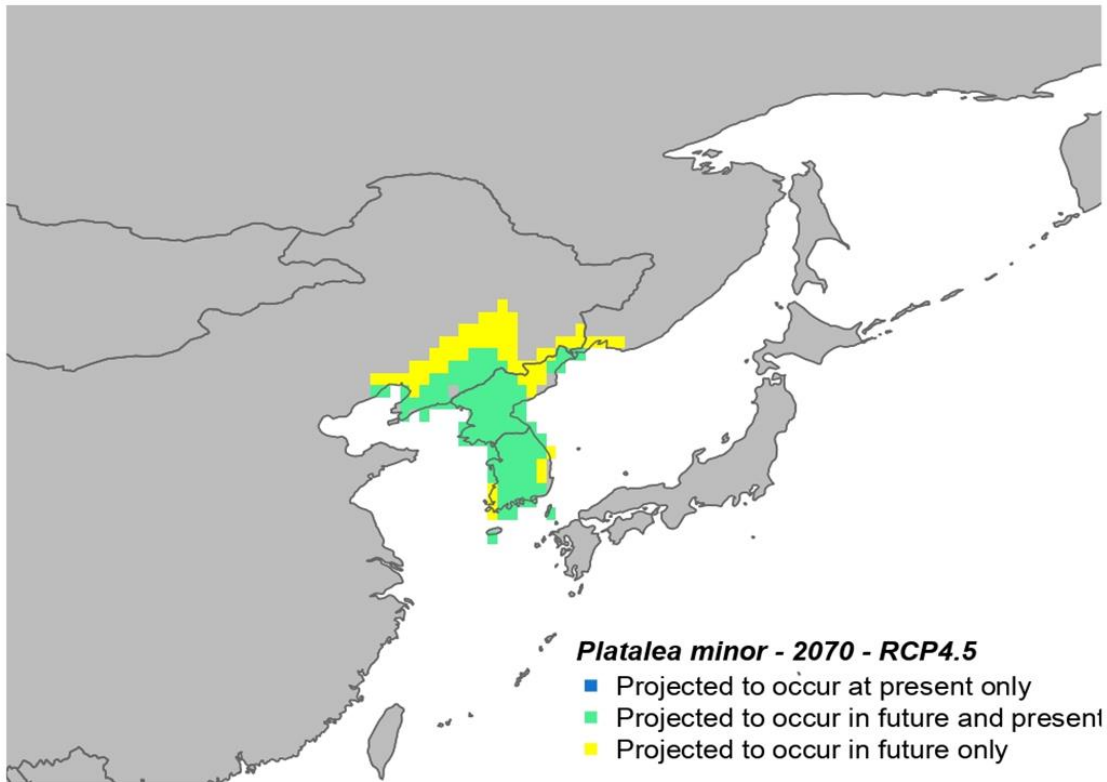# Black-faced Spoonbill (*Platalea minor*)

Figure S1. Graphical representation of the conservation metrics based on the Green Scores. Key: Vertical arrows represent the four conservation metrics: L – Conservation Legacy (may not appear if current and counterfactual states are the same); D – Conservation Dependence (may not appear if current and future-without-conservation states are the same); G – Conservation Gain (may not appear if current and future-with-conservation states are the same); P – Recovery Potential (may not appear if current and potential states are the same). The horizontal red dashed line represents the Current Green Score. Solid black line: observed change in the Green Score of the species (ignore it if "Former" state is not specified). Long-dashed black line: (counterfactual) past change expected in the absence of past conservation efforts. Dashed black lines: future scenarios of change expected with and without current and future conservation efforts. Dotted black line: long-term potential change expected with future conservation innovation and efforts.

Figure S2. Map showing current breeding areas and regular wintering areas (Cano-Alonso *et al.* 2023), based on BirdLife International (2022) and Chen *et al.* (2021).

Platalea minor - 2070 - RCP4.5
- ■ Projected to occur at present only
- ■ Projected to occur in future and present
- ■ Projected to occur in future only

Figure S3. Projected changes in the Black-faced Spoonbill's range in 2027 under RCP 4.5. Modelling carried out by the Conservation Ecology Group, Durham University (Titley and Willis, unpub. data).

Table S1. Conservation Actions ([list of action codes](#)).

Classification	Full Description	Past actions (no longer occurring)	Current actions	Actions planned within 10 years	Actions that could be implemented in the long-term aspiration scenario
1.1.	1.1. Land/water protection: Site/area protection	X	X	X	X
1.2.	1.2. Land/water protection: Resource & habitat protection	X	X	X	X
2.1.	2.1. Land/water management: Site/area management	X	X	X	X
2.2.	2.2. Land/water management: Invasive/problematic species control		X	X	X
2.3.	2.3. Land/water management: Habitat & natural process restoration			X	X
3.4.1.	3.4.1. Ex-situ conservation: Captive breeding/artificial propagation	X			
4.2.	4.2. Education and Awareness: Training		X	X	
4.3.	4.3. Education and Awareness: Awareness & communications		X	X	
5.1.1.	5.1.1. Legislation, International level	X	X	X	X
5.1.2.	5.1.2. Legislation, National level	X	X	X	X
5.1.3.	5.1.3. Legislation, Sub-national level	X	X	X	X

Classification	Full Description	Past actions (no longer occurring)	Current actions	Actions planned within 10 years	Actions that could be implemented in the long-term aspiration scenario
5.1.4.	5.1.4. Legislation, scale unspecified		X		
5.2.	5.2. Policies and regulations		X		
5.4.2.	5.4.2. Compliance and enforcement-National level	X	X	X	
5.4.3.	5.4.3. Compliance and enforcement-Sub-national level	X	X	X	X
6.1.	6.1. Livelihood, economic & other incentives: Linked enterprises & livelihood alternatives		X	X	X
6.4.	6.4. Livelihood, economic & other incentives: Conservation payments		X	X	X

Table S2. Threats ([list of threat codes](#)).

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
1.1	1.1 Residential & commercial development: Housing & urban areas	X	X	X	X
1.2	1.2 Residential & commercial development: Commercial & industrial areas	X	X	X	X
1.3	1.3 Residential & commercial development: Tourism & recreation areas		X		
2.3.4	2.3.4 Agriculture & aquaculture: Livestock farming & ranching: Scale Unknown/Unrecorded		X		
2.4.2	2.4.2 Agriculture & aquaculture: Marine & freshwater aquaculture: Industrial aquaculture	X	X	X	X
2.4.3	2.4.3 Agriculture & aquaculture: Scale Unknown/Unrecorded		X		
3.1	3.1 Energy production & mining: Oil & gas drilling				
3.2	3.2 Energy production & mining: Mining & quarrying		X		
3.3	3.3 Energy production & mining: Renewable energy		X	X	X

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
4.1	4.1 Transportation & service corridors: Roads & railroads		X	X	
4.3	4.3 Transportation & service corridors: Shipping lanes		X		
4.4	4.4 Transportation & service corridors: Flight paths		X		
5.1.2	5.1.2 Biological resource use: Hunting & collecting terrestrial animals: Unintentional effects (species being assessed is not the target)	X	X	X	X
5.4.3	5.4.3 Biological resource use: Fishing & harvesting aquatic resources: Unintentional effects: subsistence/small scale (species being assessed is not the target)[harvest]		X		
5.4.4	5.4.4 Biological resource use: Fishing & harvesting aquatic resources: Unintentional effects: large scale (species being assessed is not the target)[harvest]		X		
6.1	6.1 Human intrusions & disturbance: Recreational activities	X	X	X	X
7.3	7.3 Natural system modifications: Other ecosystem modifications		X	X	X

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
8.1.2	8.1.2 Invasive & other problematic species, genes & diseases: Invasive non-native/alien species/diseases: Named species			X	
8.4.1	8.4.1 Invasive & other problematic species, genes & diseases: Problematic species/diseases of unknown origin: Unspecified species		X		
8.5.1	8.5.1 Invasive & other problematic species, genes & diseases: Viral/prion-induced diseases: Unspecified "species" (disease)		X		
8.5.2	8.5.2 Invasive & other problematic species, genes & diseases: Viral/prion-induced diseases: Named "species" (disease)		X		
8.6	8.6 Invasive & other problematic species, genes & diseases: Diseases of unknown cause		X		
9.1.1	9.1.1 Pollution: Domestic & urban waste water: Sewage		X		
9.1.2	9.1.2 Pollution: Domestic & urban waste water: Run-off		X		
9.1.3	9.1.3 Pollution: Domestic & urban waste water: Type Unknown/Unrecorded		X		

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
9.2.1	9.2.1 Pollution: Industrial & military effluents: Oil spills				X
9.2.2	9.2.2 Pollution: Industrial & military effluents: Seepage from mining				X
9.2.3	9.2.3 Pollution: Industrial & military effluents: Type Unknown/Unrecorded		X		
9.3.1	9.3.1 Pollution: Agricultural & forestry effluents: Nutrient loads				X
9.3.2	9.3.2 Pollution: Agricultural & forestry effluents: Soil erosion, sedimentation		X	X	
9.3.3	9.3.3 Pollution: Agricultural & forestry effluents: Herbicides & pesticides		X	X	
9.3.4	9.3.4 Pollution: Agricultural & forestry effluents: Type Unknown/Unrecorded		X		
9.4	9.4 Pollution: Garbage & solid waste		X		
9.5.1	9.5.1 Pollution: Air-borne pollutants: Acid rain		X		
9.5.2	9.5.2 Pollution: Air-borne pollutants: Smog				X

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
9.5.4	9.5.4 Pollution: Air-borne pollutants: Type Unknown/Unrecorded				X
9.6.1	9.6.1 Pollution: Excess energy: Light pollution		X		
9.6.3	9.6.3 Pollution: Excess energy: Noise pollution		X	X	
9.6.4	9.6.4 Pollution: Excess energy: Type Unknown/Unrecorded		X		
11.1	11.1 Climate change & severe weather: Habitat shifting & alteration			X	X
11.2	11.2 Climate change & severe weather: Droughts			X	X
11.4	11.4 Climate change & severe weather: Storms & flooding			X	X

References

BirdLife International and Handbook of the Birds of the World. Bird Species Distribution Maps of the World. Version 2022.1. 2022. Available at: http://datazone.birdlife.org/species/requestdis (accessed on 15 November 2022).

Cano-Alonso, L.S., Grace, M.K., Yu, Y.-t. and Chan, S. 2023. Reversing the decline in a threatened species: The Black-Faced Spoonbill *Platalea minor*. *Diversity* 15: 217. https://doi.org/10.3390/d15020217

Chen, Y., Yu, Y.-t., Meng, F., Deng, X., Cao, L., Fox, A.D. 2021. Migration routes, population status and important sites used by the globally threatened Black-faced Spoonbill (*Platalea minor*): A synthesis of surveys and tracking studies. *Avian Research* 12(74). https://doi.org/10.1186/s40657-021-00307-z

Appendix 1. Assessor Self-Review

1. **Disclose any potential conflicts of interest which could bias the assessment**.

    None

2. **Is there any discrepancy between this assessment and the Red List assessment for the species? If so, comment on the likely reason for this discrepancy.**

    None

3. **Review the impact that you assigned to the various threats and conservation actions. Would the trajectory of the species be very different if other choices were made? If so, review your justification for these choices. If appropriate, widen the bounds on tabs 4 and 5-8 (change the lower and upper plausible values) to reflect the uncertainty introduced by the possibility of these other choices. How, if at all, did this review question cause this assessment to change? If no changes were needed, please write "no changes".**

    No changes