

# **Appendix J      Significant Fauna Likelihood of Occurrence**

## **Vertebrate Fauna Survey**

**North Star Junction Additional Area**

**Fortescue Pty Ltd**

SLR Project No.: 675.072466.00001

17 September 2025

**Conservation Status:** State - Listed under Biodiversity Conservation Act 2016 or Department of Biodiversity, Conservation and Attractions Conservation, Commonwealth - Listed under Environmental Protection and Biodiversity Conservation Act 1999. CR/CE - Critically Endangered, EN - Endangered, VU - Vulnerable, MI - Migratory, CD - Conservation Dependent fauna, OS - Other Specially Protected fauna, MA - Marine, P - Listed as Priority by DBCA. **Source:** NM - NatureMap, PMST - EPBC Protected Matters Search Tool, DBCA - DBCA Threatened and Priority Fauna database search, Field - Recorded during the current field survey.

Family	Scientific Name	Conservation Status		Habitat	Previous Records	Likelihood of Occurrence
		State	Commonwealth			
<b>Birds</b>						
<b>Apodidae</b>	<i>Apus pacificus</i> Pacific Swift, Fork-tailed Swift	MI	MI, MA	Low to very high airspace over varied habitat (Pizzey and Knight, 2012).	The DBCA database returned 13 records within 50 km of the Survey Area, including 0.3 km west in 2011 and 47 km northwest in 2022 (DBCA, 2024).	<b>High</b> Nearby, recent records and may occupy airspace above Survey Area but will not reply on terrestrial habitats within the Survey Area.
<b>Charadriidae</b>	<i>Anarhynchus veredus</i> Oriental Plover	MI	MI, MA	Open plains; bare, rolling country, often far from water; ploughed land; muddy or sandy wastes near inland swamps or tidal flats; bare claypans; margins of coastal marshes; grassy airfields, sportsfields, lawns (Pizzey and Knight, 2012).	The DBCA database returned two records, one 8 km south of the Survey Area in 2022 and one 13 km north of the Survey Area in 1999 (DBCA, 2024).	<b>High</b> Nearby, recent records and suitable airspace within the Survey Area.
<b>Charadriidae</b>	<i>Pluvialis fulva</i> Pacific Golden Plover	MI	MI, MA	Estuaries, mudflats, saltmarshes, mangroves; rocky reefs and stranded seaweed on ocean shores; margins of shallow open inland swamps; sewage ponds, short-grass paddocks, sportsground, airfield, ploughed land (Pizzey and Knight, 2012).	The DBCA database returned one record 46 km northeast of the Survey Area in 1979 (DBCA, 2024).	<b>Low</b> One historic record and no suitable habitat within the Survey Area.
<b>Falconidae</b>	<i>Falco hypoleucos</i> Grey Falcon	VU	VU	Open plains with treed watercourses in arid inland (Menkhorst et al., 2017).	The DBCA database returned eight records within 50 km of the Survey Area, including within the Survey Area in 2014 and 17.1 km northwest in 2017 (DBCA, 2024).	<b>Recorded</b> Recorded within the Survey Area during the field survey. Species also previously recorded within Survey Area. Suitable hunting and nesting habitats within Survey Area.
<b>Falconidae</b>	<i>Falco peregrinus</i> Peregrine Falcon	OS	-	Most environments with suitable nest sites: cliff faces preferred, including man-made ones, commonly uses stick nests built by other species (Menkhorst et al., 2017).	The DBCA database returned five records within 50 km of the Survey Area, including 11.2 km west in 2013 and 32.7 km south in 2019 (DBCA, 2024).	<b>Medium</b> Limited nearby, recent records with limited nesting habitat and suitable hunting habitat within the Survey Area.
<b>Fregatidae</b>	<i>Fregata ariel</i> Lesser Frigatebird	MI	MI, MA	Oceanic, breed on islands (Pizzey and Knight, 2012).	The DBCA database returned one record 49 km north of the Survey Area in 1979 (DBCA, 2024).	<b>Low</b> Outside taxon distribution. One historic record has low certainty and likely to be erroneous.

Family	Scientific Name	Conservation Status		Habitat	Previous Records	Likelihood of Occurrence
		State	Commonwealth			
Glareolidae	<i>Glareola maldivarum</i>	MI	MI, MA	Plains; shallow wet and dry edges of open bare wetlands; tidal mudflats, beaches (Pizzey and Knight, 2012).	The DBCA database returned one record 47 km north of the Survey Area in 2012 (DBCA, 2024).	<b>Low</b>
	Oriental Pratincole					No nearby records, suitable plain habitat within the Survey Area.
Hirundinidae	<i>Hirundo rustica</i>	MI	MI, MA	Open country; agricultural land, especially near water; railyards, towns, overhead wires (Pizzey and Knight).	No nearby records identified from the database searches or literature. Species only returned from PMST which measures distribution, not individual records (PMST, 2024).	<b>Low</b>
	Barn Swallow					No nearby records, suitable plain habitat within the Survey Area.
Laridae	<i>Hydroprogne caspia</i>	MI	MI, MA	Coastal, offshore waters; beaches, mudflats, estuaries, larger rivers, reservoirs, lakes. Sometimes found inland (Pizzey and Knight, 2012).	The DBCA database returned one record 46 km north of the Survey Area in 1979 (DBCA, 2024).	<b>Low</b>
	Caspian Tern					One historic record and no suitable habitat within the Survey Area.
Laridae	<i>Thalasseus bergii</i>	MI	MI, MA	Coastal, beaches, bays, lagoons, salt ponds and lakes, estuaries, tidal creeks (Morcombe, 2003; Johnstone and Storr, 1998).	The DBCA database returned one record 46 km north of the Survey Area in 1979 (DBCA, 2024).	<b>Low</b>
	Greater Crested Tern, Crested Tern					One historic record and no suitable habitat within the Survey Area.
Motacillidae	<i>Motacilla cinerea</i>	MI	MI, MA	Running water near disused quarries; sandy, rocky streams in escarpments; sewage ponds, ploughed fields, airfields (Pizzey and Knight 2012).	No nearby records identified from the database searches or literature. Species only returned from PMST which measures distribution, not individual records (PMST, 2024).	<b>Low</b>
	Grey Wagtail					No nearby records or suitable habitat within the Survey Area.
Motacillidae	<i>Motacilla tschutschensis</i>	MI	MI, MA	Short grass and bare ground; swamp margins, sewage ponds, saltmarshes, ploughed fields, airfields, lawns (Pizzey and Knight, 2012).	No nearby records identified from the database searches or literature. Species only returned from PMST which measures distribution, not individual records (PMST, 2024).	<b>Low</b>
	Eastern Yellow Wagtail					No nearby records or suitable habitat within the Survey Area.
Pandionidae	<i>Pandion haliaetus</i>	MI	MI, MA	Coasts, estuaries, bays, inlets; islands and surrounding waters; coral atolls, reefs, lagoons, rock cliffs, stacks; larger rivers (Pizzey and Knight, 2012).	The DBCA database returned three records within 50 km of the Survey Area, including 34.6 km south in 2013 (DBCA, 2024).	<b>Low</b>
	Osprey					Limited nearby, recent records and no suitable habitat within the Survey Area.

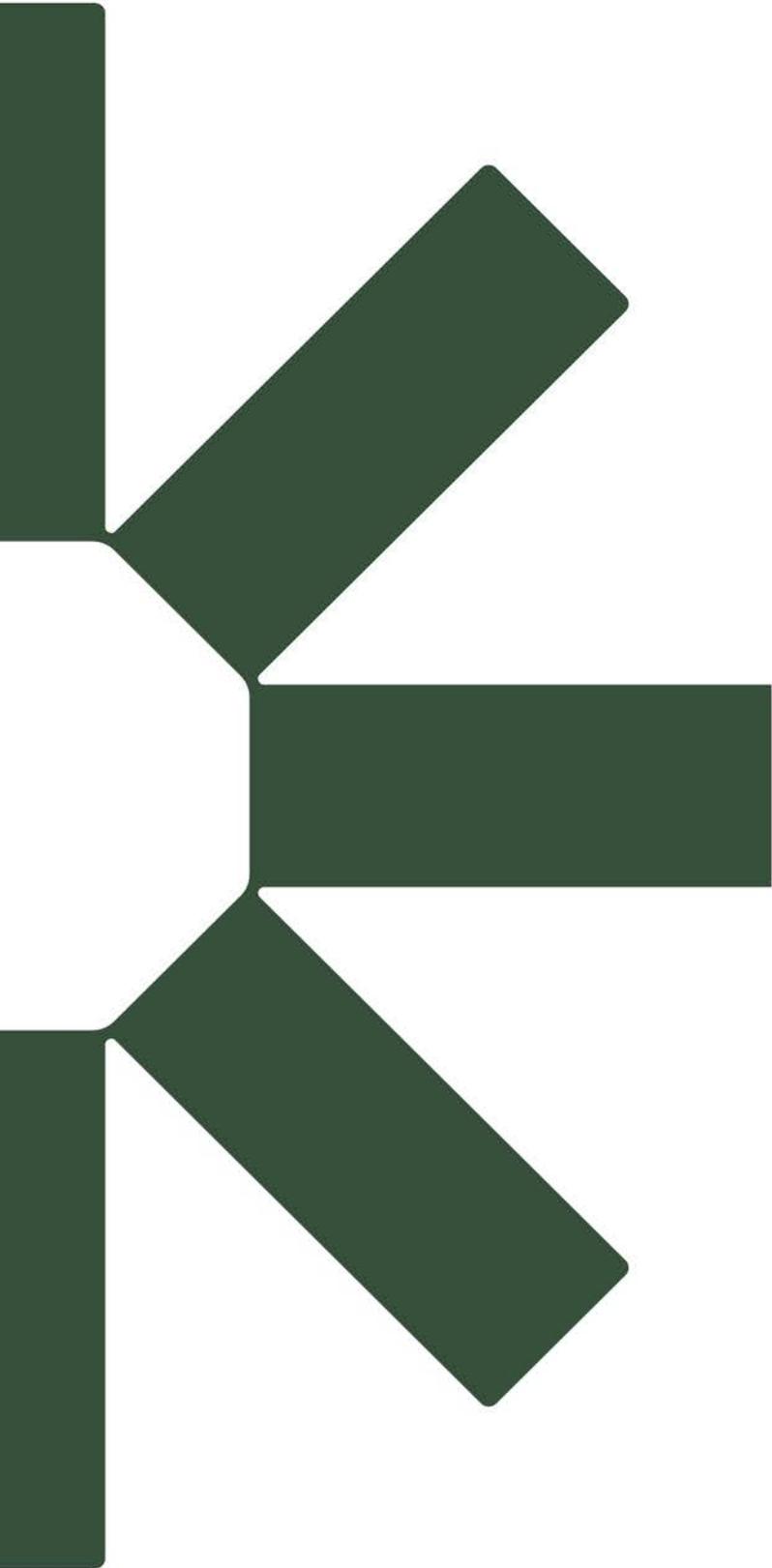
Family	Scientific Name	Conservation Status		Habitat	Previous Records	Likelihood of Occurrence
		State	Commonwealth			
Psittaculidae	<i>Pezoporus occidentalis</i>	CR	EN	Seeding spinifex on stony rises, breakaway country, sandy lowlands; shrubby glasswort, chenopods; succulents on flats around salt lakes; flooded claypans, saltbush, bluebush, bassia associations (Pizzey and Knight, 2012).	No nearby records identified from the database searches or literature. Species only returned from PMST which measures distribution, not individual records (PMST, 2024).	Low
	Night Parrot					No nearby or recent records, no suitable unburnt spinifex or chenopod habitat occurs within the Survey Area.
Psittaculidae	<i>Polytelis alexandrae</i>	P4	VU	Spinifex with Eucalyptus, Acacia, desert-oaks, desert poplars, Hakeas, mistletoes; parakeelia, other succulents around salt lakes; often far from fresh water (Pizzey and Knight, 2012).	No nearby records identified from the database searches or literature. Species only returned from PMST which measures distribution, not individual records (PMST, 2024).	Low
	Princess Parrot					No nearby records or suitable habitat within the Survey Area.
Rostratulidae	<i>Rostratula australis</i>	EN	EN, MA	Well-vegetated shallows and margins of wetlands, dams, sewage ponds; wet pastures, marshy areas, irrigation systems, lignum, tea-tree scrub, open timber (Pizzey and Knight, 2012).	No nearby records identified from the database searches or literature. Species only returned from PMST which measures distribution, not individual records (PMST, 2024).	Low
	Australian Painted Snipe					No nearby records or suitable habitat within the Survey Area.
Scolopacidae	<i>Actitis hypoleucos</i>	MI	MI, MA	Shallow, pebbly, muddy or sandy sedges of rivers and streams, coastal to far inland; dams, lakes, sewage ponds; margins of tidal rivers; waterways in mangroves or saltmarsh; mudflats; rocky or sandy beaches; causeways, riverside lawns, drains, street gutters (Pizzey and Knight, 2012).	One record 7.3 km northwest in 2019 (Western Wildlife, 2020). The DBCA database returned four records within 50 km of the Survey Area, including two records 16.9 km northwest in 2017 (DBCA, 2024).	Medium
	Common Sandpiper					Nearby, recent records and seasonally limited habitat when watercourses and wetlands become inundated within the Survey Area.
Scolopacidae	<i>Arenaria interpres</i>	MI	VU, MI, MA	Tidal reefs and pools; weed-covered rocks; pebbly, shelly and sandy shores with stranded seaweed; mudflats; occasionally inland on shallow waters; sewage ponds, commercial saltflats (Pizzey and Knight, 2012).	The DBCA database returned one record within 50 km of the Survey Area, 49.2 km northwest in 1979 (DBCA, 2024).	Low
	Ruddy Turnstone					One historic record and no suitable habitat within the Survey Area.

Family	Scientific Name	Conservation Status		Habitat	Previous Records	Likelihood of Occurrence
		State	Commonwealth			
<b>Scolopacidae</b>	<i>Calidris acuminata</i> Sharp-tailed Sandpiper	MI	VU, MI, MA	Tidal mudflats, saltmarshes, mangroves; shallow fresh, brackish or saline inland wetlands; muddy edges of lagoons, swamps, lakes, floodwaters, dams, irrigated pastures and crops; sewage ponds, saltfields (Morcombe, 2003; Pizzey and Knight, 2012).	The DBCA database returned one record within 50 km of the Survey Area, 49.3 km northwest in 1979 (DBCA, 2024).	<b>Low</b> One historic record and no suitable habitat within the Survey Area.
<b>Scolopacidae</b>	<i>Calidris ferruginea</i> Curlew Sandpiper	CR	CE, MI, MA	Inter-tidal mudflats of estuaries, lagoons, mangrove channel; saltmarsh, saltfields; fresh, brackish or saline wetlands; flooded saltbush surrounds of inland lakes; dams, floodwaters, sewage ponds (Morcombe, 2003; Pizzey and Knight, 2012).	No nearby records identified from the database searches or literature. Species only returned from PMST which measures distribution, not individual records (PMST, 2024).	<b>Low</b> No nearby records or suitable habitat within the Survey Area.
<b>Scolopacidae</b>	<i>Calidris melanotos</i> Pectoral Sandpiper	MI	MI, MA	Shallow fresh waters, often with low grass or other herbage; swamp margins, flooded pastures, sewage ponds; occasionally tidal areas, saltmarshes (Pizzey and Knight, 2012).	No nearby records identified from the database searches or literature. Species only returned from PMST which measures distribution, not individual records (PMST, 2024).	<b>Low</b> No nearby records or suitable habitat within the Survey Area.
<b>Scolopacidae</b>	<i>Calidris ruficollis</i> Red-necked Stint	MI	MI, MA	Tidal mudflats, saltmarshes, sandy or shelly beaches; saline and freshwater wetlands, salt fields, sewage ponds (Pizzey and Knight, 2012).	The DBCA database returned one record within 50 km of the Survey Area, 49.3 km northwest in 1979 (DBCA, 2024).	<b>Low</b> One historic record and no suitable habitat within the Survey Area.
<b>Scolopacidae</b>	<i>Numenius madagascariensis</i> Far Eastern Curlew, Eastern Curlew	CR	CE, MI, MA	Estuaries, tidal mudflats, sandspits, saltmarshes, mangroves; occasionally fresh or brackish lakes; bare grasslands near water (Pizzey and Knight, 2012).	No nearby records identified from the database searches or literature. Species only returned from PMST which measures distribution, not individual records (PMST, 2024).	<b>Low</b> No nearby records or suitable habitat within the Survey Area.
<b>Scolopacidae</b>	<i>Tringa brevipes</i> Grey-tailed Tattler	MI, P4	MI, MA	Estuaries, tidal mudflats, mangroves; wave-washed rocks and reefs; shallow margins of coastal or inland rivers (Pizzey and Knight, 2012).	The DBCA database returned one record within 50 km of the Survey Area, 49.3 km northwest in 1979 (DBCA, 2024).	<b>Low</b> One historic record and no suitable habitat within the Survey Area.

Family	Scientific Name	Conservation Status		Habitat	Previous Records	Likelihood of Occurrence
		State	Commonwealth			
<b>Scolopacidae</b>	<i>Tringa glareola</i> Wood Sandpiper	MI	MI, MA	Muddy margins of wetlands with emergent sedges and taller fringing vegetation; tidal mangroves; margins of tidal mudflats; saltmarshes, sewage pond (Pizzey and Knight, 2012; Menkhorst et al., 2017).	The DBCA database returned one record within 50 km of the Survey Area, 28 km south in 1957 (DBCA, 2024).	<b>Low</b> One historic record and no suitable habitat within the Survey Area.
<b>Scolopacidae</b>	<i>Tringa nebularia</i> Common Greenshank	MI	EN, MI, MA	Mudflats, estuaries, saltmarshes, swamps, margins of lakes, muddy shallows of lagoons; permanent and temporary wetlands, claypans; commercial saltfield, irrigated crops, sewage ponds (Morcombe, 2003; Pizzey and Knight, 2012).	The DBCA database returned two records within 50 km of the Survey Area, including 31 km south of the Survey Area in 2005, and 49.3 km northwest in 1979 (DBCA, 2024).	<b>Low</b> Two historic records and no suitable habitat within the Survey Area.
<b>Mammals</b>						
<b>Dasyuridae</b>	<i>Antechinomys longicaudatus</i> Long-tailed Dunnart	P4	-	Rugged, rocky areas in the arid zone: scree slopes, boulder and stony plateaus and adjacent stony plains with shrubs over spinifex hummock grasslands (Van Dyck, Gynther and Baker, 2013).	One record identified near the Survey Area in 2012 (Ecologia Environment, 2012). The DBCA database returned three records within 50 km of the Survey Area, including 11.9 km west in 2012 (DBCA, 2024).	<b>High</b> Nearby, recent records and suitable habitat within the Survey Area.
<b>Dasyuridae</b>	<i>Dasyercus blythi</i> Brush-tailed Mulgara, Ampurta	P4	-	Hummock grasslands (e.g. <i>Triodia</i> spp.) and shrublands on sandy soils (Menkhorst and Knight, 2010).	The DBCA database returned 119 records within 50 km of the Survey Area, including four records 2.8 km northeast in 2012 and 36.3 km northwest in 2022 (DBCA, 2024).	<b>High</b> Nearby, recent records and suitable habitat within the Survey Area.
<b>Dasyuridae</b>	<i>Dasyurus hallucatus</i> Northern Quoll	EN	EN	Dissected rocky escarpments; eucalypt forest and woodland; human settlements; occasionally in rainforest patches or on beaches (Van Dyck, Gynther and Baker, 2013).	The DBCA database returned 2,110 records within 50 km of the Survey Area, including 5.8 km west in 2013 and 25.5 km southeast in 2024 (DBCA, 2024).	<b>Recorded</b> Recorded within the Survey Area during the field survey.
<b>Hipposideridae</b>	<i>Hipposideros stenotis</i> Northern Leaf-nosed Bat	P2	-	Forage in woodland, dense vine thickets to open spinifex grasslands associated with rocky outcrops. Roosts in shallow cracks and caves, boulder piles and disused mines (Van Dyck, Gynther and Baker, 2013).	The DBCA database returned five records within 50 km of the Survey Area, including 10.9 km west in 2012 (DBCA, 2024).	<b>Low</b> Outside taxon distribution. Records are likely erroneous and potentially associated with the Pilbara Leaf-nosed Bat.

Family	Scientific Name	Conservation Status		Habitat	Previous Records	Likelihood of Occurrence
		State	Commonwealth			
<b>Macropodidae</b>	<i>Lagorchestes conspicillatus leichardti</i> Spectacled Hare-wallaby	P4	-	In NT and WA, Acacia shrubland and spinifex grassland (Van Dyck, Gynther and Baker, 2013).	The DBCA database returned 281 records within 50 km of the Survey Area, including 2.8 km south in 2022 (DBCA, 2024).	<b>High</b> Several nearby, recent records and suitable habitat within the Survey Area.
<b>Megadermatidae</b>	<i>Macroderma gigas</i> Ghost Bat	VU	VU	Deep caves and mines, and occasionally rock fissures and boulder piles occurring within a widespread but patchy distribution across northern Australia from the arid Pilbara to the lush rainforests of north Queensland (Baker and Gynther, 2023).	The DBCA database returned 429 records within 50 km of the Survey Area, including 2 km south in 2011 and 28 km south in 2023 (DBCA, 2024).	<b>High</b> Several nearby, recent records and suitable habitat within the Survey Area.
<b>Muridae</b>	<i>Leggadina lakedownensis</i> Short-tailed Mouse	P4	-	Monsoon tropical coast to semiarid areas in spinifex and tussock grasslands, samphire, sedgeland, Acacia shrublands, tropical eucalypt and Melaleuca woodlands and stony ranges (Van Dyck, Gynther and Baker, 2013).	One record identified near the Survey Area in 2004 (Biota Environmental Sciences, 2004). The DBCA database returned one record within 50 km of the Survey Area, 34 km southeast in 2001 (DBCA, 2024).	<b>Low</b> No recent records, however suitable habitat does occur within the Survey Area.
<b>Muridae</b>	<i>Pseudomys chapmani</i> Western Pebble-mound Mouse	P4	-	Gentler slopes of rocky ranges covered by stony mulch and hard spinifex, often with a sparse overstorey of eucalypts and scattered shrubs (Van Dyck, Gynther and Baker, 2013).	The DBCA database returned 285 records within 50 km of the Survey Area, including four records within the Survey Area in 2022 (DBCA, 2024).	<b>Recorded</b> Recorded within the Survey Area during the field survey and previously recorded within the Survey Area.
<b>Phalangeridae</b>	<i>Trichosurus vulpecula arnhemensis</i> Northern Brushtail Possum	VU (Kimberley)	VU	Generally prefers dry eucalypt forests and woodlands. In tropical woodlands, brushtail populations will have a patchy distribution where the large eucalypts and a well-developed understorey are important and can only fully develop with a very low fire frequency. Places for denning may include a hollow dead branch, tree trunk, fallen log, rock cavity or even a hollowed-out termite mound (Van Dyck and Strahan, 2008).	The NatureMap search returned two records within 50 km of the Survey Area (NatureMap, 2024).	<b>Low</b> Outside taxon distribution. Common Brushtail Possum ( <i>T. v. vulpecula</i> ) recorded during the 2025 survey.

Family	Scientific Name	Conservation Status		Habitat	Previous Records	Likelihood of Occurrence
		State	Commonwealth			
Rhinonycteridae	<i>Rhinonycteris aurantia</i> Pilbara form	VU	VU	Most easily observed foraging in gorges and gullies, often over pools, also spinifex hummock grasslands. Roosts in relatively deep, warm and humid caves and mine adits (Van Dyck, Gynther, and Baker, 2013).	The DBCA database returned 847 records within 50 km of the Survey Area, including 5.6 km west in 2019 and 38.9 km east in 2023 (DBCA, 2024).	<b>Recorded</b>
	Pilbara Leaf-nosed Bat					Recorded within the Survey Area during the field survey.
Thylacomyidae	<i>Macrotis lagotis</i>	VU	VU	Mitchell grass and stony downs country of cracking clays, desert sandplains and dune fields sometimes containing laterite, hummock grassland and massive red earths with Acacia shrubland (Van Dyck, Gynther and Baker, 2013).	The DBCA database returned 461 records within 50 km of the Survey Area, including within the Survey Area in 2019 and 11 km south in 2022 (DBCA, 2024).	<b>Previously Recorded</b>
	Bilby, Dalgyte					Previously recorded within the Survey Area.
<b>Reptiles</b>						
Pythonidae	<i>Liasis olivaceus barroni</i>	VU	VU	Associated with open water, watercourses, and rock pools especially those close to rocky areas. Often found in rocky hills, escarpments, and plains dominated by dense grassy vegetation such as <i>Triodia</i> (Wilson and Swan, 2021).	The DBCA database returned 69 records within 50 km of the Survey Area, including 8 km east in 2022 (DBCA, 2024).	<b>High</b>
	Pilbara Olive Python					Recorded just outside the Survey Area during the 2022 survey. Several recent, nearby records and suitable habitat within the Survey Area.
Scincidae	<i>Ctenotus nigrilineatus</i>	P1	-	Spinifex plains adjacent to granite outcrops and watercourses near Woodstock, Meentheena and Nullagine in hilly interior of Pilbara (Wilson and Swan, 2021).	The DBCA database returned one record within 50 km of the Survey Area, 34 km southeast in 2001 (DBCA, 2024).	<b>Low</b>
	Pin-striped Finesnout Ctenotus					No recent records, however suitable habitat does occur within the Survey Area.
Scincidae	<i>Liopholis kintorei</i>	VU	VU	Found in arid sandflats and clay-based/loamy soils with spinifex (Wilson and Swan, 2021).	No nearby records identified from the database searches or literature. Species only returned from PMST which measures distribution, not individual records (PMST, 2024).	<b>Low</b>
	Great Desert Skink					No nearby records and outside of known distribution.
Typhlopidae	<i>Anilius ganei</i>	P1	-	Associated with moist gorges and valleys (Wilson and Swan, 2021).	The DBCA database returned three records within 50 km of the Survey Area, including two records 14.4 km northeast in 2005 and 24.7 km east in 2018 (DBCA, 2024).	<b>High</b>
	Gane's Blind Snake					Nearby, recent records and suitable habitat within the Survey Area. In the 2024 survey <i>Anilius</i> sp. was recorded. The individual had scale counts that matched <i>A. ganei</i> , however its appearance was not consistent with <i>A. ganei</i> therefore it could not be identified to species level.



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