

pink or creamy white, minutely speckled with bright brown on underlying cloudy spots of very faint brown. Some spotted with yellowish to pinkish brown and pale grey, often over underlying marks of very faint lilac and bluish grey. Markings often concentrated in ring at obtuse end¹⁹. Size (n=30) 17.6–20.6 × 12.9–14.6 mm (19.0 × 13.8 mm)^{2,13,15,17,23}. **Incubation:** Period 12–14 d¹⁰. **Development & care of young:** Newly hatched young has 1 apical and 2 lateral tongue spots¹¹; no further data. Nestling period 12–13 d¹⁰; fed by both ads²². **Breeding success:** In e Africa, parasitised by Diderick Cuckoo¹⁸.

CONSERVATION: Not threatened; has probably benefited from man-made wetlands¹, and silting up of rivers, which promotes growth of aquatic vegetation⁹. May be negatively impacted by invasion of waterways by alien Spanish Reed *Arundo donax*⁷, which forms tall, dense beds, replacing native water plants.

MOULT: Primary moult in Zimbabwe Sept–Mar¹²; in s Zambia recorded Feb, Apr, Aug⁵. Some Zambian birds have irregular moult, perhaps suspended^{5,21}.

GEOGRAPHICAL VARIATION: Mainly in shade of brown on upper parts, underpart coloration, and size. **Subspp:** Africa 10, s Africa 4.

B. b. baboecala (Vieillot). From Great Kei R, E Cape, west to W Cape south of Berg R. (Described under **Identification**.)

B. b. msiri Neave, 1909, *Bull. Br. Ornithol. Club*, 25:25; Bunkeya R, Lufira Valley, Shaba, DRC. Caprivi Strip, Namibia, and w Okavango Swamps, Botswana; extraliminally, in s and e Angola, w and n Zambia and s DRC. Upper parts more chestnut-brown than nominate, throat and breast whitish. Flanks, belly and undertail coverts dull chestnut. Bill longer and more slender.

B. b. transvaalensis Roberts, 1919, *Ann. Transvaal Mus.*, 6(3):116; Wakkerstroom, Mpumalanga. Plateau of Zimbabwe east to the eastern highlands, Gauteng highveld, uplands of w KwaZulu-Natal, Free State and E Cape, and Lesotho lowlands. Underparts, incl sides, flanks and undertail coverts, whiter than nominate. Central and lower throat more heavily streaked than *B. b. tongensis*. Tail longer: tail (20 unsexed) 62.0–69.5 (65.1)²².

B. b. tongensis Roberts, 1931, *Ann. Transvaal Mus.*, 14(3):241; Kosi Bay, KwaZulu-Natal. Eastern and ne Zimbabwe west to the confluence of the Chobe and Zambezi R, e Limpopo Province, Mpumalanga, e Swaziland, midlands of KwaZulu-Natal, and coastal E Cape. Extraliminally, to e and s Zambia, Malawi, n Mozambique, Tanzania and se Kenya. Upper parts and tail more rufous than nominate, lower throat and breast less streaked. Underparts pale yellow, undertail coverts paler yellow. Smaller and shorter-tailed: wing (9 ♂) 53–58 (56.3), (6 ♀) 55–65 (58.3); tail (9 ♂) 54–65 (60.2), (6 ♀) 50–61 (54.5); mass Tanzania (3 ♂) 15.2–16.0 (15.6), (2 ♀) 15.5, 17.0²², Zimbabwe (49 unsexed) 11.2–15.0 (13.6)¹².

MEASUREMENTS: mixed subspp wing (174 unsexed) 53.0–66.5 (58.6); tail (126 unsexed) 56.5–79.0 (65.5); tarsus (45 unsexed) 19–24 (21.5); culmen (126 unsexed) 11–19 (14)¹⁰; mass (2 ♂) 17.9, 17.9, (2 ♀) 14.0, 18.1⁶, (83 unsexed) 11.2–17.0 (14)¹⁰.

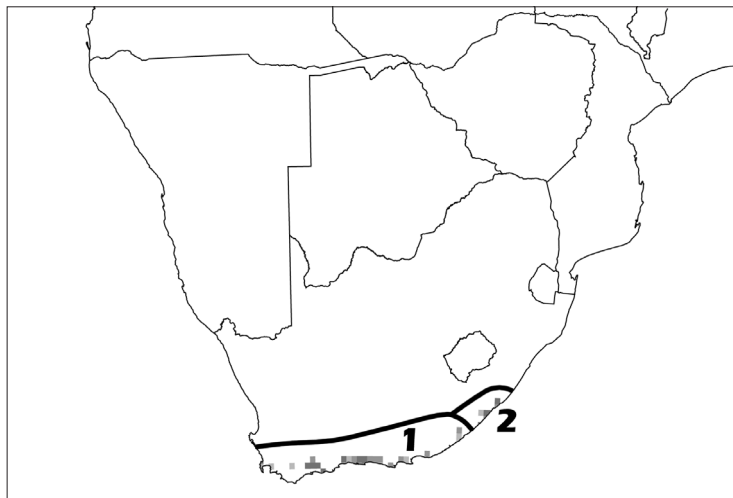
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Knysna Warbler *Bradypterus sylvaticus*



R640 *Bradypterus sylvaticus* Sundevall, 1858, in Grill, K. *Sv. Vet.-Akad. Handl.*, (new ser), 2(10):30; Knysna, s W Cape. *sylvaticus* (L) = inhabitant of or pertaining to woods.



1. *B. s. sylvaticus*; 2. *B. s. pondoensis*.

IDENTIFICATION: 14–15 cm, 21 g. Sexes differ slightly in plumage coloration. (*B. s. sylvaticus*) Ad ♂: Upper parts chocolate or olive-brown; supercilium greyish, indistinct. Dark triangular mark on lores bordered below by short, white stripe. In subdued light, loreal spot contrasts with orbital ring. Tail dark brown, broad and graduated. Underparts slightly paler brown than upper parts; throat and upper breast streaked darker brown. Bill brown. Eyes brown; broken eye ring whitish, forming crescents at front and rear of eye. Legs pale flesh to olive-brown. Ad ♀: As ♂, but lacks dark loreal spot with white lower border. Throat paler, bordered by indistinct dark moustachial stripes; eye ring less prominent²². **Juv:** As ad, but face and underparts strongly washed yellowish, throat and breast streaked brown¹⁸. **Confusing species:** Barratt's Warbler longer-tailed; also paler and more conspicuously streaked below. Songs similar, but opening notes of Barratt's Warbler shorter, softer and more slurred. Little Rush-Warbler proportionally longer-tailed and with markedly paler underparts; generally segregated by habitat, but sometimes in close proximity.

VOICE: Sings least 11h00–14h00²²; regularly sings at night¹⁰. Typically sings from thick cover; occasionally in open (eg on mesh fence), or from up to 4 m high in bamboo thicket¹⁰. A loud ringing *wit, wit, wit* repeated ca 14× ending in bubbling trill¹⁸. Contact call a low, repeated *brrit, churr-churr*, soft *trr-up* or loud *peet* or *peer*^{14,18}; ♂ call harsher and more explosive than that of ♀¹⁹. Alarm call a repetitive *prrrit, prrrit, prrrit-prrrit*¹⁸ or short *tjoorr, tjoorr*^{12,15}. Soliciting call of nestling is a high-pitched *tseeeto-tseeeto*²⁰.

DISTRIBUTION: Endemic to S Africa. Patchy along littoral from Mbumbazi NR, s KwaZulu-Natal¹ west to Cape Peninsula, W Cape³. Formerly near Durban, KwaZulu-Natal⁶, but no recent records from the area^{3,9}.

POPULATION & DEMOGRAPHY: Rare. Total population est in 10 000s⁴, but this probably too high.

MOVEMENTS: Resident¹¹; putative winter immigration to KwaZulu-Natal⁷ unlikely^{4,5}. ♂♂ sedentary; ♀♀ seemingly leave territories at end of br season, returning at start of following season¹⁹. Location of ♀♀ outside br season unknown.

HABITAT: Low, dense tangled growth, usually along watercourses, on edge of temperate forest or in thickets of aliens, incl Cherry-pie *Lantana camara* and brambles (*Rubus* spp)³. Disappears from wooded areas if canopy becomes too thick, preventing understorey development¹⁰.

GENERAL HABITS: Very secretive; presence usually revealed only when calling. Emerges from cover in response to alarm calls of other spp¹⁸.

FORAGING & FOOD: Forages mostly on ground, creeping through dense, low, matted vegetation, with slow walk; appears hunched and mouse-like¹². Scratches in humus, or crouches and flutters wings and wags outspread tail, then searches area exposed by scratching^{12,18}. Eats grasshoppers, insect larvae, spiders, slugs and worms¹⁸.

BREEDING: Monogamous^{18,22}. Solitary nester; nests spaced at 56 m, 57 m apart (n=3)²². Territorial¹⁸; on Cape Peninsula, W Cape,

territories 0.44–0.54 ha (0.5 ha, $n=3$)²². On Cape Peninsula, ♂ starts singing from song perches in Aug. Song perches sited at territory edge; distance between singing ♂♂ 15+ m. Singing perches <1.5 m above ground, in pockets of densest vegetation²². When ♀ arrives in territory, ♂ escorts ♀ during her movements through territory²². During escort period, pair may stay in small areas of territory, probably linked to nest site choice²². **Nest:** Built by ♀, in 8 d ($n=3$), gathering material, 1 item at a time, <5 m from nest site²². Loosely constructed open nest with thick foundation of dead and dying leaves (plucked from bushes) overlaid with dry grass and narrow-bladed leaves. Cup neat and compact, lined with fine, dry plant material, incl rootlets²². Outside diam ($n=7$) 120–150 mm (135 mm), height 90–150 mm (120 mm); cup diam 55–65 mm (58 mm), depth 30–70 mm (55 mm)²². Construction starts est 14 d after ♀ arrives in territory²². Nest-building activity greatest in morning. ♂ remains close to nest site, using song perch 3.5–5.0 m away. When ♀ returns to nest, ♂ follows to within 0.5–1.5 m of nest, then returns rapidly to song perch; silent when ♀ at nest²². **Laying dates:** Sept–Nov^{12,15,22}. **Eggs:** 2–3 (2.6, $n=10$)^{12,15,22}. Oval. Pinkish white, speckled and spotted with reddish, overlying similar but less obvious ash-grey markings; markings sparse¹² or heavy¹⁷, sometimes concentrated at obtuse end²². Size ($n=20$) 19.6–21.5 × 13.7–14.9 mm (20.7 × 14.4 mm)^{12,22}. Re-lays up to 2× if eggs lost; starts building new nest 10–12 d after loss²². **Incubation:** Starts 3–4 hr after clutch completion. Before clutch completion, both ads forage close to nest²². Period 16 d, 16 d ($n=2$)²², 19 d ($n=1$)¹², by ♀ only²². Incubation bouts 30–40 min, between which ♀ makes short foraging trips within 5 m of nest. Around midday, ♀ sometimes makes single, longer foraging trip of 30–60 min, up to 30 m from nest²². During incubation period, ♂ regularly sings from original song sites, up to 70 m from nest²². **Development & care of young:** Newly hatched young has 3 dark tongue spots²²; no further details. Fed by both ads, ♂ seemingly playing leading role²². Chicks fed singly with 1 or more food items. Arachnids and terrestrial amphipods accounted for 84% of 243 food items delivered; also wood lice, moths, caterpillars, cockroaches, earwigs, crane flies and stick insects²². On av, 1 delivery/3.6 min²². Ads swallow faecal sacs or fly with them away from nest²². When nest threatened by predators, incl Southern Boubou, ads leave nesting

area or sing to distract predator¹⁵. **Breeding success:** No multi-brooding recorded²². Of 18 eggs (3 pairs in 1 season), 5 hatched, and 3 nestlings left nests (all from 1 nest); overall productivity 1 young/pair/yr²². Most losses due to nocturnal predation, but no predators identified²².

CONSERVATION: *Vulnerable*². Habitat threatened by burning of firebreaks adjacent to forest¹³. On Cape Peninsula, W Cape, numbers have decreased by >50% since late 1980s^{11,21}. Remaining population has retreated to green belts heavily invaded by alien plants, and has mostly left forested areas¹⁰. Reason for this possibly reduced fire frequency, resulting in expansion of forest outwards from drainage lines and subsequent loss of dense riparian vegetation due to canopy overgrowth and reduced light penetration¹⁰.

MOULT: No data.

GEOGRAPHICAL VARIATION: Mainly in plumage coloration. **Subsp:** Africa 2, s Africa 2.

B. s. sylvaticus Sundevall. W Cape to E Cape, at about Port Elizabeth¹⁸, eastern limits uncertain⁸. (Described under **Identification**.)

B. s. pondoensis Haagner, 1909, *J. S. Afr. Ornithol. Union*, 5(2):90; West Transkei (= E Cape), Type from Port St Johns. Coastal forests of e E Cape east to s Kwa-Zulu-Natal. Darker above than nominate; wings and tail more olive-brown. Breast darker, unstreaked; sides of body and flanks dark olive-brown, washed yellow.

MEASUREMENTS: *B. s. sylvaticus* wing (8 unsexed) 58–62 (60.1); tail (8 unsexed) 58–62 (59.6); tarsus (8 unsexed) 16.7–18.6 (17.6); culmen exposed (8 unsexed) 11.8–13.9 (12.7)⁴; mass (1 unsexed) 21¹⁶.

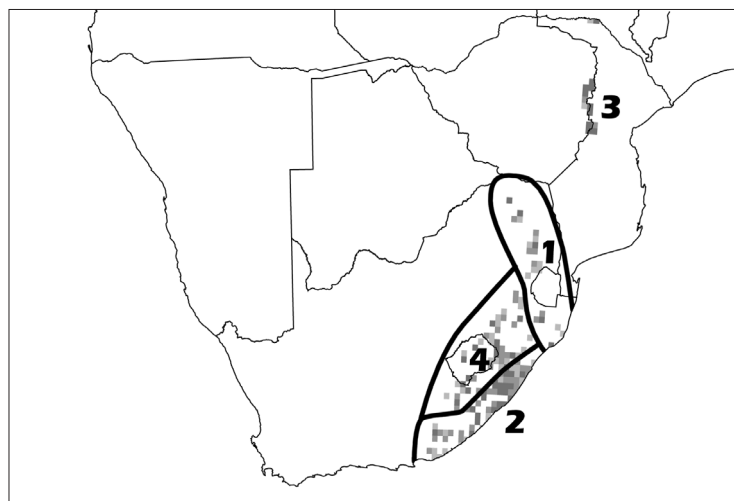
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P848

Barratt's Warbler *Bradypterus barratti*



R639 *Bradypterus barratti* Sharpe 1876, *Ibis*, p53; Macamac = Mac Mac Forest Reserve, Pilgrim's Rest, Mpumalanga. *barratti* = after FA Barratt (ca 1847–1875), a collector in S Africa.



1. *B. b. barratti*; 2. *B. b. godfreyi*; 3. *B. b. priesti*; 4. *B. b. cathkinensis*.

IDENTIFICATION: 15 cm, ca 15 g. Sexes alike. (*B. b. barratti*) **Ad:** Upper parts, from crown to tail, chocolate brown; rump and tail washed rufous. Lores, cheeks and ear coverts dark brown; supercilium greyish buff, indistinct. Upper wing coverts rufous-brown, edged cinnamon-brown; marginal upper wing coverts buffy. Primaries rufous-brown, outer webs edged cinnamon-brown; secondaries rufous-brown, edged cinnamon-brown. Axillaries and underwing coverts ashy brown. Chin and throat buffy white, throat faintly streaked dark brown. Breast and sides of neck greyish olive, washed buffy, breast streaked dark brown. Centre of lower breast and belly

buffy white, with a few greyish streaks. Flanks, thighs and undertail coverts brownish olive. Bill black. Eyes hazel-brown, or pale to dark brown. Legs and feet dark brownish flesh. **Juv:** Little known; as ad, but tail shorter, upper parts more olive, underparts yellowish^{2,11}. **Confusing species:** Knysna Warbler shorter-tailed; also darker and less conspicuously streaked below. Songs similar, but opening notes of Knysna Warbler longer, louder and more discrete. Inadequate information to separate juvs².

VOICE: Song starts with deliberate high-pitched notes *tik, tik, tik, tik...*, followed by lower notes speeding up to a trill⁶. Alarm call a quiet growling *chrr-chrr*⁷.

DISTRIBUTION: Endemic to s Africa. Patchy; in eastern highlands of Zimbabwe. Historically reported from adjacent Mozambique and Mt Gorongosa (but no recent records). Also from Zoutpansberg, Limpopo Province south through KwaZulu-Natal and Lesotho to about Grahamstown, E Cape^{1,3}.

POPULATION & DEMOGRAPHY: Uncommon to locally fairly common⁷. 1 unsexed ad recaptured after almost 8 yr⁸.

MOVEMENTS & MIGRATIONS: Migrates in winter to lower altitudes (as far as the coast in E Cape)².

HABITAT: Dense tangled scrub, bracken (*Pteridium* spp), brambles (*Smilax* spp and alien *Rubus* spp) and heath (*Erica* spp) along streams, in clearings and on edges of forest and plantations¹.

GENERAL HABITS: Usually solitary or in pairs¹¹. Remains on or near ground; climbs agilely among vegetation¹².

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