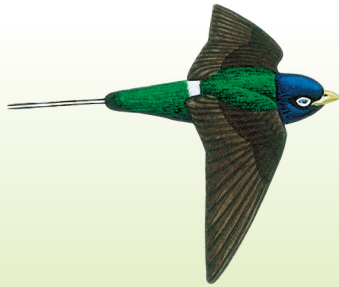


A FIELD GUIDE TO THE

BIRDS OF THAILAND

CRAIG ROBSON



"One of the best bird field guides ever published."

Oriental Bird Club Bulletin on Craig Robson's A Field Guide to the Birds of South-East Asia

B L O O M S B U R Y

A FIELD GUIDE TO THE

BIRDS

OF

THAILAND

CRAIG ROBSON

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INTRODUCTION

This guide is a condensed version of *A Field Guide to the Birds of South-East Asia* (Robson 2000), tailored specifically for Thailand, and intended to be as portable as possible, for use in the field. Obviously, in order to save space and, therefore, weight, the species accounts are relatively short and are intended to be as concise as possible within the publisher's brief. For more detailed information on a given species, the above-mentioned guide should be consulted.

Taxonomy and nomenclature follow *A Field Guide to the Birds of South-East Asia*, with two exceptions; **Slender-billed Vulture** *Gyps tenuirostris* is split from **Long-billed (Indian) Vulture** *G. indicus*, following Rasmussen and Parry (2001), and the very distinctive **Green-backed Flycatcher** *Ficedula elisae* is split from **Narcissus Flycatcher** *F. narcissina*, following Philip Round's *Field Check-list of Thai Birds* (Round 2000).

Unfortunately, however, in order to balance out the plates, and compare some similar species, it has not been possible to follow the exact (correct) species order.

A small number of additional illustrations, depicting recently recorded species in Thailand and certain races found in Thailand, have been executed for this book.

All species recorded in Thailand up to mid-February 2001 are dealt with and illustrated. Two new species for Thailand have been recorded between this date and the book going to press: **Pallid Harrier** *Circus macrourus* at Thale Noi, S Thailand, in late February 2001, and **Long-tailed Wren Babbler** *Spelaornis chocolatinus* on a high mountain near Umphang, W Thailand, in late April 2001.

If readers find any errors or omissions, the author (c/o the publishers, Bloomsbury) would be pleased to receive any information which updates or corrects that presented herein, in the hope that an improved edition may appear in the future.

SPECIES ACCOUNT/PLATE INFORMATION

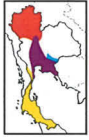
- ◆ The **total length** of each species appears after the species name.
- ◆ A comparative approach has been adopted with species descriptions, where scarcer species are generally compared to commoner or more widespread species. In general, those species considered to be easily identifiable have been afforded less coverage than the more difficult species.
- ◆ **Comparisons between similar species** are dealt with directly and separately under the various sex/age or other headings.
- ◆ **Males** are described first (except in polyandrous species) and female plumage compared directly to the male plumage.
- ◆ Names of illustrated **subspecies** are given only after the first sex/age class dealt with. It can be assumed that the following illustrations are of the same race, until another one is mentioned. The regions of Thailand (see end paper) where a given subspecies has been recorded (NW, S etc.) appear in brackets after its name, though generally not in the case of the first subspecies dealt with, the range of which can be deduced by consulting the map and then subtracting the ranges of other subspecies. Subspecies given as 'ssp.' are in the process of being described. See for example White Wagtail *Motacilla alba* ssp./sp., which is likely to be described as a new species shortly.

Details of **non-illustrated** sex/age classes refer to the first subspecies illustrated, unless stated. Apart from a few exceptions, the subspecies listed under '**Other subspecies**' are not considered to differ markedly from the first subspecies mentioned.

- ◆ **Altitude ranges** refer to Thailand only.
- ◆ Species depicted on any one plate have been illustrated to the same **scale** (smaller in the case of flight figures) unless stated otherwise.
- ◆ Readers may notice that the **generic names** of a few species have been abbreviated. This was a necessary space-saving measure.

MAP KEY

The maps are based on those produced by Philip Round in his ground-breaking *A Guide to the Birds of Thailand* (Boonsong Lekagul and Philip D. Round 1991), but have been updated where recent information was available to the author. They represent real (known) distribution only.



- resident
- breeding visitor
- winter/non-breeding visitor
- passage migrant

E = extirpated

E? = possibly extirpated

B? = possible breeding visitor

I = introduced

I? = possibly introduced

◦ vagrant/rare

◦ formerly recorded

USEFUL ADDRESSES

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Malaysia

AVIAN TOPOGRAPHY

The figures below illustrate the main plumage tracts and bare-part features. This terminology for bird topography has been used extensively in the species descriptions, and a full understanding of these terms is important if the reader is to make full use of this book; they are a starting point in putting together a description.

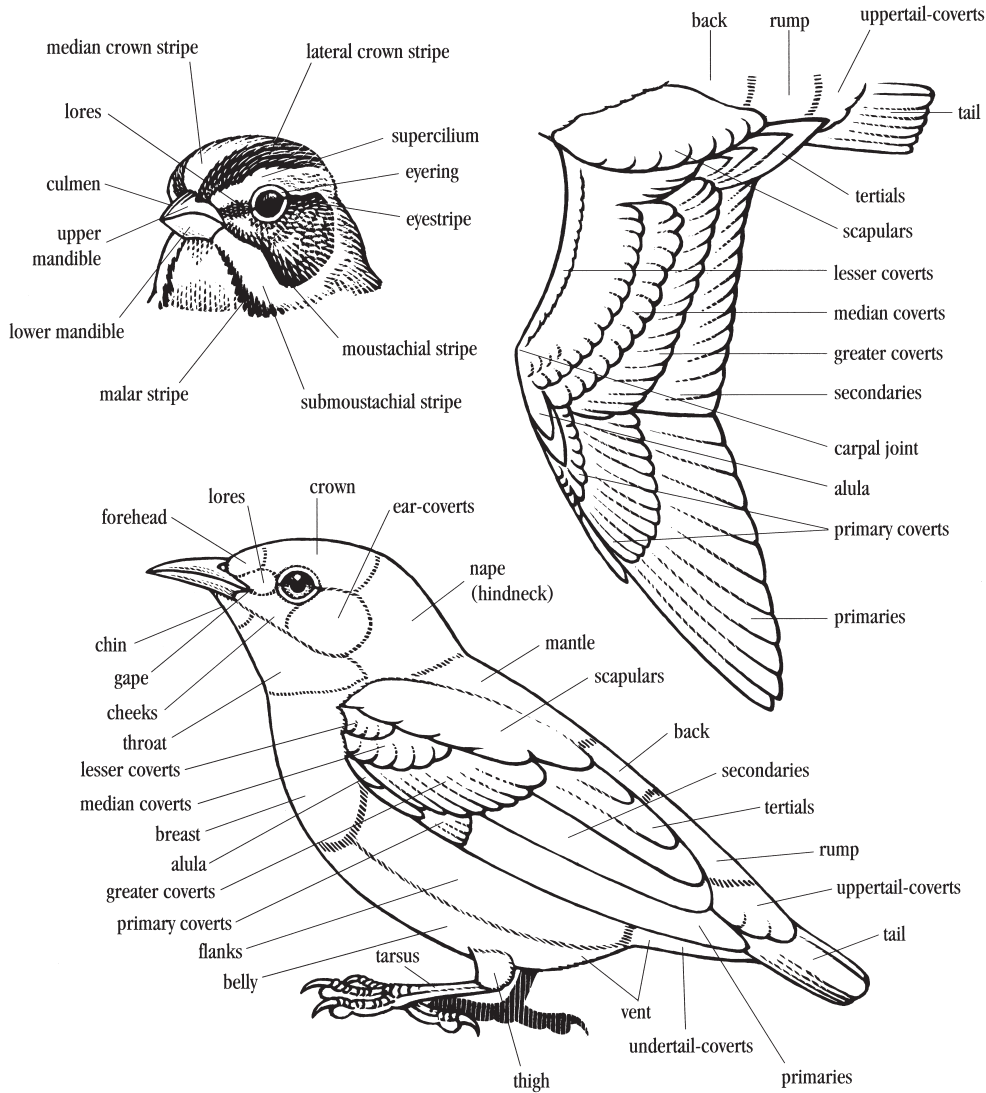


PLATE 1 CHINESE FRANCOLIN, PARTRIDGES, QUAILS & BUTTONQUAILS

เพลท 1 นกกระทาทุ่ง, นกกระทาแดง, นกคุ่ม และนกคุ่มแพ

CHINESE FRANCOLIN *Francolinus pintadeanus* 30.5–33.5 cm

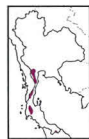


(1) **Male phayrei**: Black body boldly spotted and barred whitish to buffy-white, bold black, chestnut and white head pattern, chestnut scapulars. (2) **Female**: Duller than male, chestnut areas washed brown, facial pattern softer, underparts barred.

(3) **Juvenile**: Duller than female, less rufous on crown-sides, pale-streaked upperparts. **VOICE** Male territorial call is a loud harsh metallic *wi-ta-tak-takaa*, repeated after rather long intervals. **HABITAT** Open forest and woodland, grass and scrub; up to 1,500 m.

LONG-BILLED PARTRIDGE *Rhizothera longirostris*

36–40.5 cm



(4) **Male longirostris**: Long stout bill, dark chestnut crown, light chestnut head-sides and throat and lower breast/flanks, grey foreneck and upper breast to upper mantle, mostly buffish wing-coverts, yellow legs. (5) **Female**: Lacks grey on breast/mantle; throat/breast light chestnut; back to uppertail-coverts warmer buffish. (6) **Juvenile**: As female but warmer above, dark spots/bars on breast, buff-streaked throat/breast/neck/mantle. **VOICE** Territorial call is a far-carrying double whistle with distinctly higher second note; usually given in duet, producing a rising repetitive four-note sequence. **HABITAT** Broadleaved evergreen forest, bamboo; up to 300 m.

CRESTED PARTRIDGE *Rollulus rouloul* 24–29.5 cm



(7) **Male**: Glossy blue-black above and below (usually bluer on mantle, greener towards tail), large fan-shaped chestnut-maroon crest, long wire-like forehead plumes, red orbital skin, bill-base and legs, dark brownish wings. (8) **Female**: Green with grey hood, blackish nape, chestnut/rusty wings with darker markings, red eyering/legs. (9) **Juvenile**: Warm brown crown-sides, duller mantle and breast, dull greyish belly/vent; pale wing-covert spots. **VOICE** Persistently uttered melancholy, upslurring, whistled *su-il*. **HABITAT & BEHAVIOUR** Lowland broadleaved evergreen forest. Usually in flocks, sometimes quite large.

JAPANESE QUAIL *Coturnix japonica* 19 cm



(10) **Male non-breeding**: Dark centre/transverse band on white throat, richer buff/chestnut breast than female. (11) **Male breeding japonica**: Uniform pale pinkish-chestnut head-sides and throat. (12,13) **Female**: Greyish-brown above with dark marks and pale streaks, pale ear-coverts, white throat with dark bars at side, rufescent breast/flanks with dark markings and whitish streaks. Plain upperwing, barred primaries. **First winter**: Similar to female. **VOICE** Male territorial call is a loud *choo-peat-trrr* or *guku kr-r-r-r-r*. **HABITAT** Grassy areas, cultivation; up to 400 m.

RAIN QUAIL *Coturnix coromandelica* 16.5–18.5 cm



(14) **Male**: Large black breast-patch, black flank-streaks. (15) **Female**: Washed-out (often greyish-tinted) breast with irregular dark spots; unbarred primaries. **Juvenile**: Similar to female (both sexes) but perhaps initially more heavily speckled on breast. **VOICE** Male territorial call is a loud sharp

metallic *whit-whit* or *which-which*, repeated every 0.5–1 s, in series of 3–5. **HABITAT** Dry grassland and scrub, dry cultivation; lowlands.

BLUE-BREASTED QUAIL *Coturnix chinensis* 13–15 cm



(16) **Male chinensis**: Relatively unstreaked upperparts; slaty-blue face, breast and flanks, black-and-white markings on throat and upper breast, chestnut lower breast to vent. (17,18) **Female**: Smaller than other quail with less streaked upperparts, long buff supercilium, barring on breast and flanks, yellowish legs; uniform brown upperwing. **Juvenile**: Similar to female but initially (at least when very small) lacks rufous on head and neck and has dense blackish-brown mottling and whitish streaks on breast and flanks. Males soon attain patches of adult plumage. **VOICE** Male territorial call is a sweet whistled *ti-yu ti-yu*. **HABITAT** Dry/slightly marshy grassland, scrub, cultivation; up to 1,300 m.

SMALL BUTTONQUAIL *Turnix sylvatica* 13–14 cm



(19,20) **Female mikado**: Like Yellow-legged Buttonquail but smaller, with pale chestnut wing-coverts (contrast less with flight feathers than in other buttonquail), strong buff stripes on mantle and tertials, paler buff and sharply defined breast-patch, slaty-blue to blackish bill, fleshy-greyish legs. (21) **Juvenile**: Less distinct buff breast-patch, blackish spots across breast. **Male**: Mantle duller. **VOICE** Female territorial call is far-carrying series of booming *boooooo* notes (each 1 s long, after 1–3 s intervals). **HABITAT** Dry grassland, scrub and grass bordering cultivation; up to 400 m.

YELLOW-LEGGED BUTTONQUAIL *Turnix tanki* 16.5–18 cm



(22,23) **Female blanfordii**: Sandy-buff wing-coverts (more contrasting with flight feathers than in other buttonquail) with large black spots, deep buff breast-band, round black spots on upper flanks (otherwise rather plain below), rufous nuchal collar (lacking on male), extensive yellowish bill, yellow legs. (24) **Juvenile**: Duller; less distinct breast-patch, faint narrow bars on throat/breast, indistinct wing-covert spots. **Male**: Lacks female's rufous nuchal collar. **VOICE** Female territorial call is described as series of low-pitched hooting notes, gradually increasing in strength and turning into a human-like moan. **HABITAT** Grassy areas, slightly marshy grassland, scrub, cultivation, secondary growth; up to 2,000 m.

BARRED BUTTONQUAIL *Turnix suscitator* 15–17.5 cm



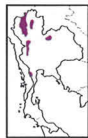
(25,26) **Female thai**: Bold, dense pattern on head/breast/flanks/wing-coverts, whitish-buff speckled head, black throat/upper breast, black-and-whitish bars on lower throat to flanks, black-and-buff barred coverts, rufous vent. (27) **Male**: Like female but no black patch on throat and breast. (28) **Female blakistoni** (recorded NW): More rufous-chestnut above, buffier below (both sexes). **Juvenile**: As male. **Other subspecies T.s.atrogularis** (S): Richer belly/vent. **VOICE** Females give soft reverberating booming notes, which gradually get louder. **HABITAT** Dry grassland, cultivation, secondary growth; up to 1,500 m.



PLATE 2 PARTRIDGES & RED JUNGLEFOWL

เพลท 2 นกกระทาแดงและไก่ป่า

RUFIOUS-THROATED PARTRIDGE *Arborophila rufogularis*
25.5–29 cm



(1) **Adult tickelli**: Dark-streaked brown crown, plain olive-brown mantle, whitish lores, supercilium and ear-coverts with dark streaks, orange-rufous throat, grey breast to belly, chestnut flank-markings. (2) **Juvenile**: Plain buffish supercilium and throat, underparts spotted and streaked white.

VOICE Territorial call is a long clear plaintive whistle leading into repeated series of double whistles: *whu-whu whu-whu...*, gradually ascending scale and increasing in pitch. Partner may join in with more rapid, monotonous *keu-keu-keu-keu...*

HABITAT Broadleaved evergreen forest; 1,200–2,565 m.

BAR-BACKED PARTRIDGE *Arborophila brunneopectus*
26.5–29.5 cm



(3) **Adult brunneopectus**: Pale buff face, dark eyestripe and crown, black bars on mantle, black foreneck with buff streaks, warm brown breast to upper belly, black-and-white flank-markings.

Juvenile: May differ by broken blackish bars on breast. **VOICE** Territorial call is series of loud *brr* notes, becoming louder and leading to series of *WI-wu* couplets, which also become louder before ending abruptly: *brr-brr-brr-brr-brr-brr WI-wu WI-wu WI-wu WI-wu...* Partner often gives rapid *chew-chew-chew-chew...* at same time. Sibilant *wu-wirr wu-wirr wu-wirr...* in alarm. **HABITAT** Broadleaved evergreen forest; 500–1,480 m.

MALAYAN PARTRIDGE *Arborophila campbelli* 28 cm



(4) **Adult**: Mostly black hood, white forehead-sides (sometimes faint supercilium) and cheek/ear-covert patch, a few white streaks on neck, slaty-greyish upper mantle and breast, pale rufous and black flank markings. **Juvenile**: More chestnutting above, breast darker with blackish, grey and dull rufous bars, heavier chestnut, blackish and buffish flank markings. **VOICE** Like Bar-backed: whistled *oii* notes (c. 13 times in 10 s), usually followed by loud shrill *pi-hor* couplets. Subdued *wut-wit wut-wit wut-wit...* when alarmed. **HABITAT** Broadleaved evergreen forest; 1,000–1,600 m. **NOTE** Formerly lumped in Grey-breasted Partridge *A. orientalis*.

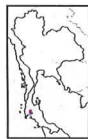
SIAMESE PARTRIDGE *Arborophila diversa* 28 cm



(5) **Adult**: From Bar-backed by chestnut patch on breast, more extensive black-and-white markings on flanks and belly, and less contrasting head pattern. (6) **Adult**: Less well-marked individual. **Juvenile**: Chestnut of breast paler and washed-out, head pattern less contrasting. **VOICE** Said to recall Bar-backed.

HABITAT Broadleaved evergreen forest; 700–1,500 m.

CHESTNUT-NECKLACED PARTRIDGE *Arborophila charltonii*
26–32 cm



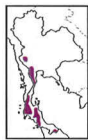
(7) **Adult charltonii**: Chestnut breast-band, pale chestnut ear-covert patch, heavy breast/flank markings. **Juvenile**: Undescribed. **VOICE** Possibly not distinguishable from Scaly-breasted. **HABITAT** Broadleaved evergreen forest; below 200 m.

SCALY-BREADED PARTRIDGE *Arborophila chloropus*
27–31.5 cm



(8) **Adult chloropus**: Rather plain; upperparts/breast olive-brown with blackish vermiculations, foreneck, lower breast/upper belly orange-buff; blackish flank markings, greenish legs, reddish bill with dull greenish-yellow tip. **Juvenile**: Whitish feather-shafts/tips on breast/flanks. **Other subspecies** *A.c.peninsularis* (south W): Much duller below. **VOICE** 20–90 clear notes, leading to 5–7 loud shrill, undulating couplets: *tu-tu...tu-tu...tu-tu-tu...tu-tu-tu-tu-tutututututu TCHIRRA-TCHWIU-TCHIRRA-TCHWIU-TCHIRRA-TCHWIU-TCHIRRA-TCHWIU-TCHIRRA-TCHWIU*. **HABITAT** Various broad-leaved forests, secondary growth, bamboo; up to 1,000 m.

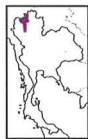
FERRUGINOUS PARTRIDGE *Caloperdix oculea* 27.5–32 cm



(9) **Male oculea**: Chestnut head and breast, black-and-whitish scaled mantle and flanks, black-and-rufous back to tail, black spots on pale wing-coverts. **Female**: Lacks leg spurs or shows single short one. See Long-billed and Black Partridges.

Juvenile: Has black bars on nape and irregular blackish spots and bars on breast. **VOICE** Territorial call is an ascending, gradually accelerating series of high-pitched notes, terminating abruptly with harsher couplets: *p-pi-pi-pipipipipi dit-duit dit-duit*. **HABITAT** Broadleaved evergreen forest, bamboo, freshwater swamp forest; up to 915 m.

MOUNTAIN BAMBOO PARTRIDGE *Bambusicola fytchii*
32–37 cm

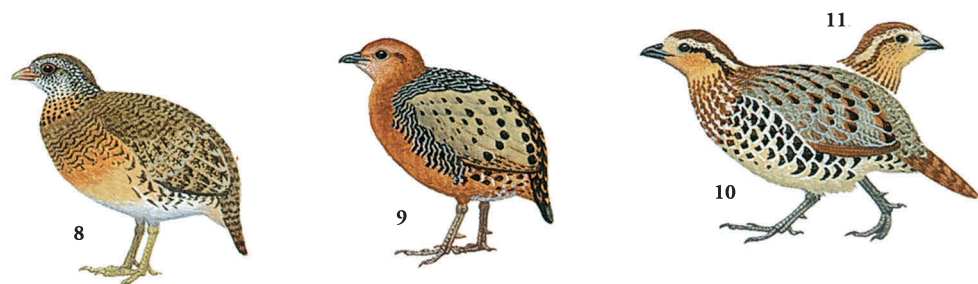
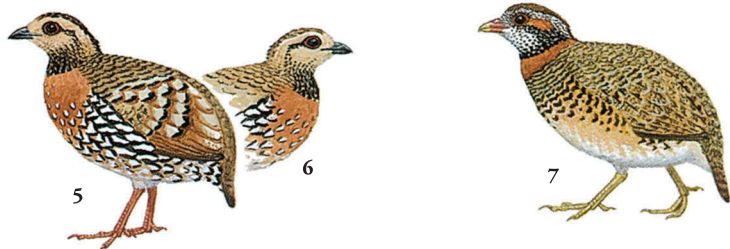


(10) **Male fytchii**: Rather long neck and tail; buffish head-sides and throat with blackish stripe behind eye, greyish-brown above with distinct dark spots, chestnut streaks on neck and breast and bold black markings on flanks. (11) **Female**: Like male but eyestripe brown. **Juvenile**: Like female but more rufescent crown, duller hindneck, more buffy-grey above with dark greyish vermiculations and larger/darker markings, greyer breast with some darker bars. **VOICE** Very loud bouts of explosive shrill chattering (two notes rapidly repeated), which slows then dies away. Hoarse *tch-bherrrr* call notes. **HABITAT & BEHAVIOUR** Grass, scrub, bamboo, secondary growth; 1,200–2,135 m. Usually in small flocks, easily flushed.

RED JUNGLEFOWL *Gallus gallus* Male 65–78 cm (includes tail up to 28 cm), female 41–46 cm



(12) **Male spadiceus**: Long rufous/yellow hackles, blackish below, green arched tail, red comb/face skin/lappets. (13) **Male eclipse**: No hackles, leaving all-blackish crown and neck; smaller comb and lappets. (14) **Female**: Smaller; short blackish/golden-buff hackles, drab brown above with fine dark vermiculations and buffy-white shaft-streaks, paler below, plain greyish-brown vent, rather short/blunt dark tail, bare pinkish face. (15) **Male gallus** (eastern NE, SE): Conspicuous white 'ear-patch' (smaller on female). **Juvenile**: Similar to female (both sexes). **VOICE** Territorial call is similar to domestic fowl but higher-pitched, with last syllable cut short. **HABITAT** Forest edge, open woodland, overgrown clearings, scrub and grass; up to 1,830 m.



12–15 to different scale

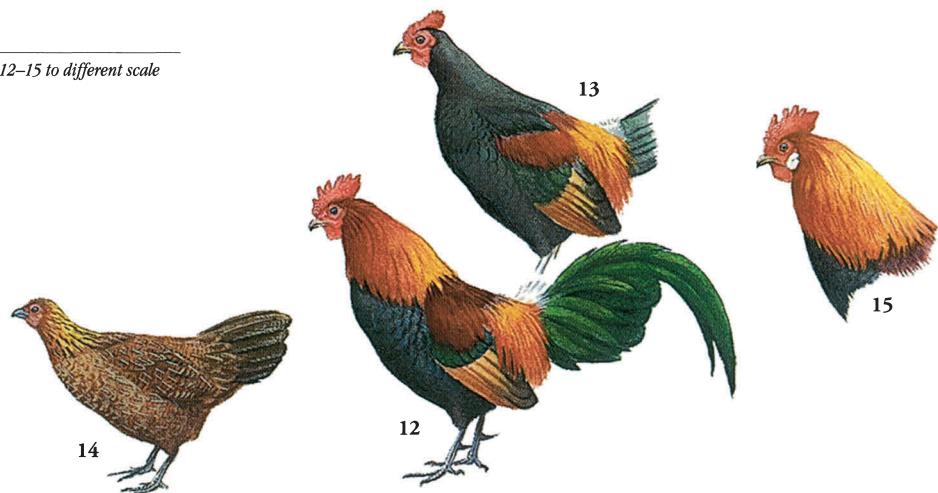


PLATE 3 PHEASANTS

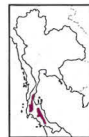
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SILVER PHEASANT *Lophura nychthemera* Male c.80–127 cm (includes tail to 76 cm), female 56–71 cm



(1) **Male** *nychthemera*: White above with black chevron/lines, blue-black below, red facial skin/legs. (2) **Female**: Plain mid-brown above (sometimes warm-tinged) with faint vermiculations, broad white and blackish scales below, blackish-and-whitish barring on outertail. (3) **Male** *lineata* (W, western NW)/*craufurdii* (south W): Much denser black markings above; legs/feet often dark grey or greyish-brown to pinkish-brown (particularly *lineata*). (4) **Female**: Light scaling above, sharp black-and-white V-shapes on hind-neck, largely dull chestnut breast/belly (blackish on *craufurdii*) with white streaks, paler creamier central tail. (5) **Male** *lewisii* (SE): Like *lineata* but upperpart markings bolder, legs/feet red. (6) **Female**: Chestnut-tinged above with greyish scaling, greyer and relatively plain below. **Juvenile**: As female but may have black spots/bars on scapulars/coverts; males soon distinguishable. **VOICE** Grunting **WWERK** notes, running to **WWERK wuk-uk-uk-uk-uk** and sharp high **HSSik**. Similar, rising **hwii-teeik**. **HABITAT & BEHAVIOUR** Broadleaved evergreen and mixed deciduous forest; 700–2,000 m. In small flocks; usually shy.

CRESTED FIREBACK *Lophura ignita* Male 65–73.5 cm (includes tail to 26.5 cm), female 56–59 cm



(7) **Male** *myfa*: Blue facial skin, purplish blue-black body, golden-rufous upper back grading to maroon shorter uppertail-coverts, white streaks on flanks, arched white central tail feathers, reddish legs. (8) **Female**: Dull rufous-chestnut, with white-streaked breast and white-scaled blackish belly/vent. **Juvenile** female: No crest, may have black-barred nape to scapulars/coverts. **Subadult male** As adult but tail has chestnut centre, rufous flank-streaks. **VOICE** Guttural **UKHH-UKHH-UKHH...** (**HH** more metallic) and low **uur** notes. **HABITAT & BEHAVIOUR** Broadleaved evergreen forest; below 200 m. Loud wing-whirrs during display.

SIAMESE FIREBACK *Lophura diardi* Male c. 70–80 cm (includes tail to 39 cm), female 53–60 cm



(9) **Male**: Pendant-tipped crest, mostly grey body, black-and-white bars on scapulars/coverts, golden-buff back-patch, bluish bars on maroon rump to uppertail-coverts and on glossy purplish-black belly, blackish-green tail. (10) **Female**: Boldly barred wings/tail, largely rufous-chestnut body and outertail, white-scaled belly/flanks. **Juvenile**: As female but may have duller mantle with dark vermiculations and duller base colour to underparts; males lack rufous/chestnut tones and soon attain adult plumage patches. **VOICE** Metallic **tsik tik-tik tik tik tik...** and guttural grunting **UKHT UKHT UKHT...** and **UKHT bewer UKHT** (**beuer** thin, rather metallic-ended), in alarm. Low **yurk-yurk** when flushed. **HABITAT & BEHAVIOUR** Broadleaved evergreen and semi-evergreen forest, secondary growth; up to 800 m.

MRS HUME'S PHEASANT *Symaticus bumiae* Male 90–92 cm (includes tail to 53.5 cm), female c.60–61 cm

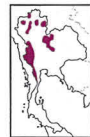


(11) **Male** *burmanicus*: Dark greyish-purple hood, chestnut body, white wing-bars, dark-barred greyish tail. (12) **Female**: White-tipped tail; generally warm brown, with blackish markings above and whitish wing-bars, warmer below with whitish scales on lower breast to vent. **Subadult male**

Some female-like wing feathers (April). **VOICE** Male territorial call is crowing **cher-a-per cher-a-per cher cher cheria cheria**. Cackling **waak** notes. Sharp **tuk tuk** when alarmed. **HABITAT** More open broadleaved evergreen forest (mainly oak and mixed oak/pine), grass and scrub; 1,200–2,285 m.

GREY PEACOCK PHEASANT *Polyplectron bicalcaratum*

Male 56–76 cm (includes tail to 42 cm), female 48.5–53 cm



(13) **Male** *bicalcaratum*: Greyish; whitish throat, green/purplish ocelli, short crest, pink facial skin. (14) **Female**: Darker and plainer with less distinct ocelli, duller facial skin. **Juvenile**: Like female. Male develops more defined and colourful ocelli during first winter and assumes adult plumage by second winter. **VOICE** Territorial call is loud, airy **PUPWOI** or **POI PWOI** (latterly drawn/rising). Also low growling rattles, becoming louder and running into much louder and harsher notes: **ubrrrrrr...ubrrrrrruk...orokbokbokbokb...OKH-OKH-OKH-OKH-OKH...ORKH-ORKH-ORKH...ORKH-ORKH-ORKH...** **HABITAT** Broadleaved evergreen forest; 300–1,800 m.

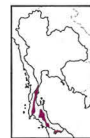
MALAYAN PEACOCK PHEASANT *Polyplectron malacense*

Male 50–53.5 cm (includes tail to 25.5 cm), female 40–45 cm



(15) **Male**: Warmer brown than Grey, ocelli greener, long dark crest, pale orange face-skin, darker ear-coverts. (16) **Female**: Smaller, shorter-tailed, less distinct/more pointed ocelli, little crest, indistinct paler scales above. **Juvenile**: Both sexes as female. **VOICE** Territorial call (dawn/dusk) is a repeated loud slow melancholy **PUPWOOI** or **PUPWORR** (second note more drawn-out/rising). Also a harsh explosive cackle, running into throaty clucks: **TCHI-TCHI-TCHAO-TCHAO wuk-wuk-wuk-wuk-wuk...** Repeated loud harsh grating **TCHOW** or **KAOW**. **HABITAT & BEHAVIOUR** Broadleaved evergreen forest; up to 305 m. Holds crest forwards over bill during display.

GREAT ARGUS *Argusianus argus* Male 160–203 cm (includes tail to 145 cm, secondaries to 102 cm), female 72–76 cm



(17) **Male** *argus*: Brown/chestnut; blue face/neck-skin, pale-marked upperparts/tail, very long secondaries/tail. (18) **Female**: Rufous-chestnut collar, less distinct markings above, much shorter secondaries/tail (latter barred). **Juvenile**: As female; males soon develop longer tail with tiny pale spots. **VOICE** Male territorial call is a very loud **KWAH-WAU** (louder, longer second note). Female gives series of 25–35 **WAU** notes, the last longer, more upward-inflected. **HABITAT & BEHAVIOUR** Broadleaved evergreen forest; up to 900 m. Very shy. Male's secondaries raised/fanned towards female during display on dancing-ground.

GREEN PEAFOWL *Pavo muticus* Male 180–250 cm

(includes 'train' to 162 cm), female 100–110 cm



(19) **Male** *imperator*: Mostly glossy green; tall crest, long broad train with large ocelli. (20) **Female**: Like male but duller, no train. **Juvenile**: Duller than female. **Other subspecies** *P.m.muticus* (S). **VOICE** Territorial males utter very loud **KI-WAO KI-WAO...** etc.; females a loud **AOW-AA** (AOW stressed), often repeated. **HABITAT & BEHAVIOUR** Open broadleaved forest, mainly bordering rivers/wetlands, secondary growth, bamboo; up to 915 m. Shy but males call from trees in early morning.

1–10, 11–12 and 13–20 to different scales

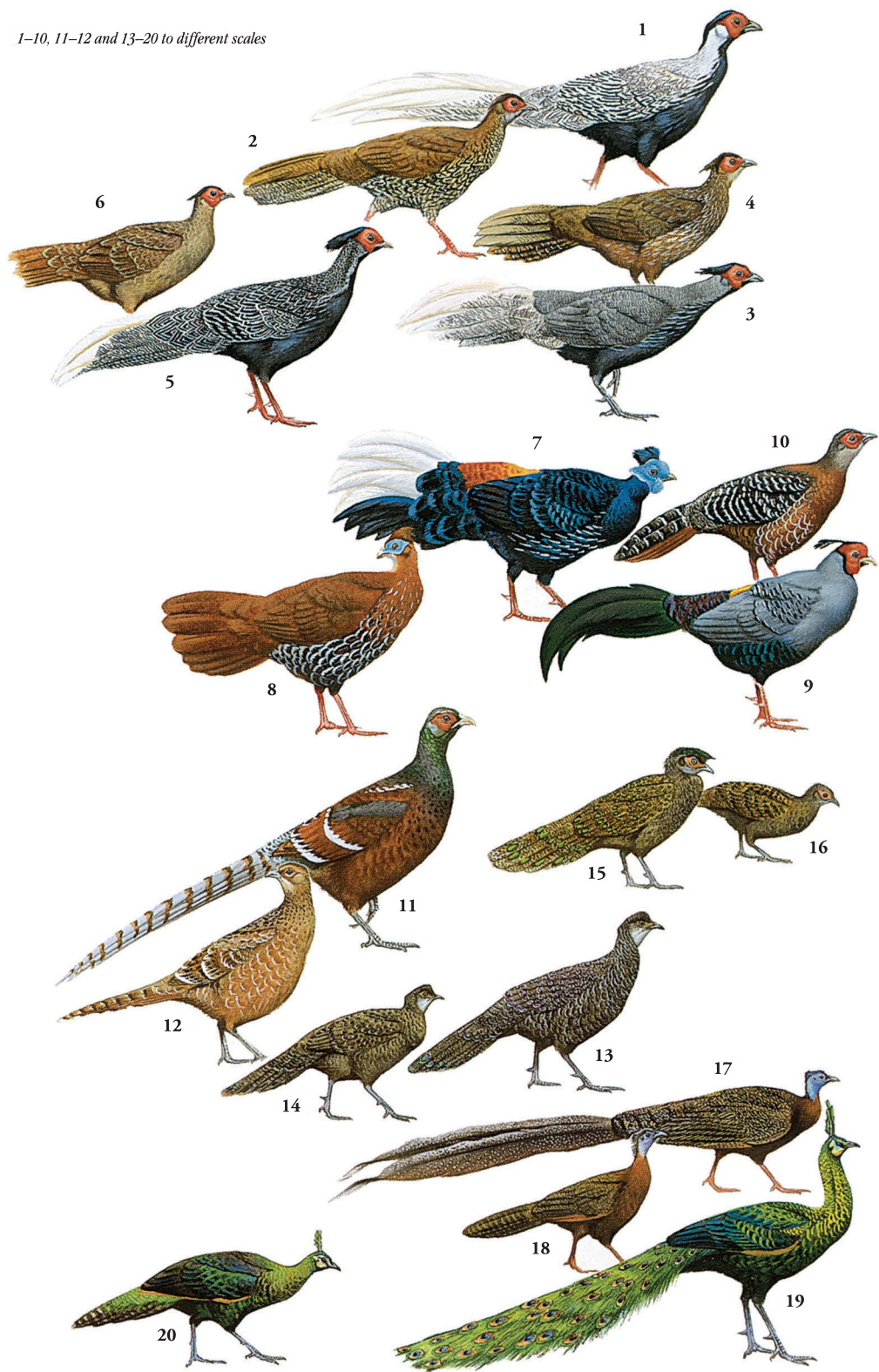


PLATE 4 WHISTLING-DUCKS, GEESE, SHELDUCKS, WHITE-WINGED DUCK & COMB DUCK

เพลท 4 นกเป็ดแดง, ห่านป่า, เป็ดเซลดัก, เป็ดก่า และ เป็ดหงส์

LESSER WHISTLING-DUCK *Dendrocygna javanica* 38–41 cm



(1,2) **Adult:** Rather long neck, relatively plain plumage, darker cap, rufous-fringed mantle feathers and scapulars, reddish-chestnut uppertail-coverts, thin whitish flank-streaks; broad, rounded dark wings with reddish-chestnut lesser and median upperwing-coverts. **Juvenile:** Somewhat duller overall, crown often paler and more greyish-brown. **VOICE** Incessantly repeated, clear, low whistled *whi-ubee*, usually when flying. Wings also make whistling sound in flight. **HABITAT & BEHAVIOUR** Lakes, marshes, sometimes mangroves, various wetlands; up to 800 m. Very gregarious, often in large flocks.

SWAN GOOSE *Anser cygnoides* 81–94 cm



(3,4) **Adult:** Resembles Greylag but bill thicker-based and blackish; crown and nape/hindneck uniform dark brown, contrasting strongly with very pale lower head-sides and throat/foreneck; darker wing-coverts in flight. (5) **Juvenile:** Crown, nape and hindneck duller, no whitish face-band. **VOICE** Prolonged resounding honks, ending at higher pitch. Short harsh note repeated 2–3 times in alarm. **HABITAT** Banks of large rivers, marshy edges of freshwater wetlands; recorded at c.400 m.

GREYLAG GOOSE *Anser anser* 78–90 cm



(6,7) **Adult** *rubrirostris*: Relatively uniform pale brownish-grey plumage, plain head/neck, pinkish bill and legs/feet; pale wing-coverts contrast with dark flight feathers above and below. **Juvenile:** Bill and legs somewhat duller, lacks dark speckling on belly. **VOICE** Noisy. In flight, utters loud series of clanging honking notes: *aabng-abng-ung*, deeper than other geese. **HABITAT & BEHAVIOUR** Lakes, rivers, estuaries, arable fields, grassy areas; lowlands. Gregarious, usually found in flocks, may associate with other geese.

BAR-HEADED GOOSE *Anser indicus* 71–76 cm



(8,9) **Adult:** Two black bands on back of white head, white line down neck-side, dark-tipped yellow bill, orange-yellow legs/feet. Upper foreneck/upper hindneck blacker than lower neck. In flight, wings like Greylag but upperwing-coverts/bases of outer primaries more uniform pale grey (sharp contrast with blackish remainder of wing). (10) **Juvenile:** Hindcrown/hindneck dark grey-brown, dusky loreal line, rest of neck more uniform pale greyish. **VOICE** Soft, nasal, repeated honking: *ob-wa*, *aab-aab* and *oob-ab* etc. Notes somewhat lower, more nasal and wider-spaced than other geese. **HABITAT & BEHAVIOUR** Large rivers, lakes, arable fields, grassy areas; up to 400 m. Usually in small flocks.

RUDDY SHELDUCK *Tadorna ferruginea* 61–67 cm



(11,12) **Male breeding:** Relatively large size and predominantly orange-rufous plumage with mostly creamy-buff head diagnostic. Has narrow black collar. In flight, shows distinctive blackish wings with contrasting whitish coverts (above and below); bottle-green gloss on secondaries. (13) **Female:** Lacks black collar, face extensively white, head buffier. **Male non-**

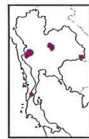
breeding Black neck-collar faint or lacking. **Juvenile:** Like female but head and upperparts strongly washed greyish-brown, underparts duller. **VOICE** Rather vocal. Typically utters a rolling, honking *aakh* and trumpeted *pok-pok-pok-pok*... **HABITAT & BEHAVIOUR** Large rivers, lakes; up to 400 m. Normally in flocks.

COMMON SHELDUCK *Tadorna tadorna* 58–67 cm



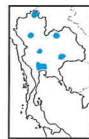
(14,15) **Male:** White body, contrasting black hood (glossed green), scapular and ventral stripes, and broad chestnut breast-/mantle-band. Bill red with prominent knob at base. In flight, wing pattern very similar to Ruddy. (16) **Female:** Smaller, bill duller (no knob), hood duller, head markings white, breast-band narrower/duller. **Male eclipse:** Smaller bill-knob, whitish mottling on face, less defined breast-band, fine greyish bars on body. **Female eclipse** Somewhat duller/greyer; more white face markings, even less distinct breast-band (may closely resemble juvenile). **Juvenile:** Head, neck and upperparts mostly sooty-brownish, face, eyering and foreneck whitish, no breast-band, all whitish below, white-tipped secondaries/inner primaries, dull pinkish bill. **VOICE** Female utters rapid chattering *gag-ag-ag-ag*...; male calls with thin low whistles. **HABITAT** Large rivers, lakes, coastal mudflats etc.; up to 400 m.

WHITE-WINGED DUCK *Cairina scutulata* 66–81 cm

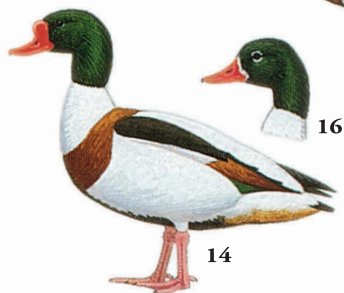
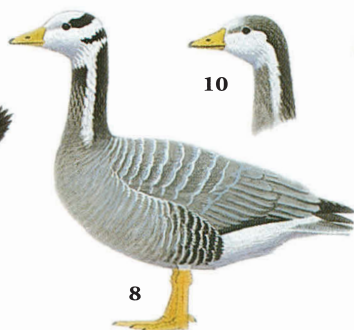
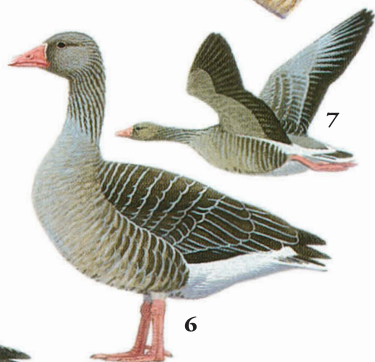
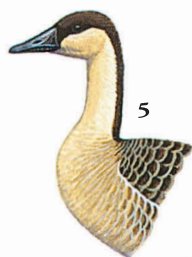
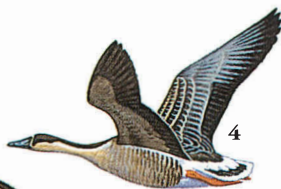
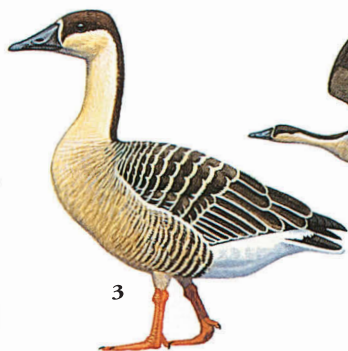


(17,18) **Male:** All-dark body, contrasting whitish head and upper neck and mostly dull yellowish to orange-yellowish bill distinctive. Head and upper neck variably mottled blackish (can be mainly white), lesser and median upperwing-coverts and inner edges of tertials white, secondaries bluish-grey. In flight, white wing-coverts (above and below) contrast sharply with rest of wings. **Female:** Smaller and slightly duller, usually with more densely mottled head and upper neck. **Juvenile:** Duller and browner, initially with pale brownish head and neck. **VOICE** Flight call is a prolonged, vibrant series of honks, often ending with a nasal whistle; mainly at dawn and dusk. Also single short harsh honks. **HABITAT & BEHAVIOUR** Pools and rivers in forest, freshwater swamp forest; up to 900 m. Usually encountered singly or in pairs. Feeds mostly at night, flying to and from roosting sites at dawn and dusk.

COMB DUCK *Sarkidiornis melanotos* 56–76 cm



(19) **Male non-breeding** *melanotos*: Black-speckled head and neck, rest of underparts whitish with grey-washed flanks, dark bill with broad knob (comb); wings appear all blackish, contrasting with pale underparts. (20,21) **Female:** Much smaller, upperside duller and less glossy, lacks knob on bill. (22) **Juvenile:** Crown/eyestripe dark brown, dark brown above with warm buff feather fringes, rest of head, neck and underparts strongly washed brownish-buff with some dark brown markings on sides of breast and flanks. **Male breeding:** Much larger knob on top of bill, rich buffish wash to sides of head and neck. **VOICE** Occasionally utters low croaking sounds. Also wheezy whistles and grunts during breeding season. **HABITAT & BEHAVIOUR** Freshwater lakes and marshes; lowlands. Found singly, in pairs or small flocks, often associating with other ducks. Feeds on land and in water.



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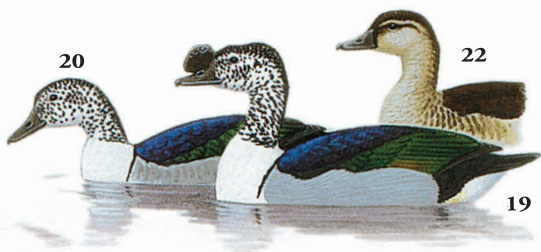


PLATE 5 DABBING DUCKS

เพลท 5 เป็ดที่ว่ายน้ำกินบนผิวน้ำ

GADWALL *Anas strepera* 46–56 cm



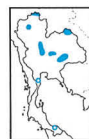
(1) **Male:** Greyish overall, black vent, blackish bill. Square white patch on inner secondaries contrasts with dark outer secondaries/inner greater coverts; maroon on median coverts. (2,3) **Female:** Like Mallard but more compact with squarer head; head pattern less contrasting, bill finer and blackish with orange sides. White patch on inner secondaries (often visible at rest). **Male eclipse:** Like female but greyer, more uniform above; retains tertial/upperwing colour/pattern below. Bill can be all dark (see female Falcated Duck). **Juvenile:** Like female but richer brown below with more distinctly streaked breast. White patch on secondaries may be very indistinct on females. **VOICE** Usually silent. Courting males utter a short *nbeck* and low whistle; females a repeated *gag-ag-ag-ag...* **HABITAT** Freshwater lakes and marshes; up to 400 m.

FALCATED DUCK *Anas falcata* 48–54 cm



(4) **Male:** Head glossy green with long 'mane' and purple crown and cheeks; throat and upper foreneck white, bisected by black band; has long curved black-and-whitish tertials, black-bordered yellowish-white patch on vent-sides; rather pale grey upperwing-coverts contrast with green-glossed black secondaries. (5,6) **Female:** From Gadwall/Eurasian Wigeon by combination of longish, narrow, dark grey bill, rather plain greyish-brown head, rather full nape feathers, dark-scaled rich brown breast/flanks, all-dark secondaries, white bar across greater upperwing-covert tips, contrasting white underwing-coverts. **Male eclipse:** Like female but crown, hindneck and upperparts darker, breast and flanks richer brown; wing pattern retained but tertials shorter. **Juvenile:** Like female but buffier, with greyer tips to greater upperwing-coverts. **VOICE** Deep nasal *beep* (male). In flight may give distinctive short low whistle followed by wavering *uit-trr*. **HABITAT** Lakes and marshes; up to 400 m.

EURASIAN WIGEON *Anas penelope* 45–51 cm



(7,8) **Male:** Bright chestnut head with broad yellowish median stripe, pinkish breast, black vent. Bill pale grey with black tip, centre of abdomen and rear flanks white. Large white patch on upperwing-coverts, greyish underwing with whiter greater/primary coverts. (9,10) **Female:** Rounded head, shortish pale grey bill with black tip, rather plain dark brownish head, neck, breast and flanks. Breast and flanks more chestnutting. In flight, underside appears uniform brownish with sharply contrasting white belly/vent; upperwing-coverts paler and greyer than rest of wing. **Male eclipse:** Similar to female but head and breast richer brown; retains white patch on upperwing-coverts (often visible at rest). **Juvenile:** Like female but has almost glossless secondaries and some brown mottling on belly. **VOICE** Male utters piercing, whistled *wbeoooo* and more subdued *ubut-ubittooo*; female gives low growling *krrr* or *karr*. **HABITAT** Lakes, large rivers, various wetlands; up to 400 m.

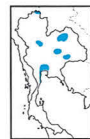
MALLARD *Anas platyrhynchos* 50–65 cm



(11) **Male platyrhynchos:** Mostly pale brownish-grey, yellowish bill, glossy green head with purple sheen, white collar, purplish-brown breast. Tail-coverts/lower scapulars black. In flight, shows glossy dark bluish secondaries, bordered at front/rear by defined white band, dark

underwing with contrasting white coverts/secondary bases. (12) **Male eclipse:** Like female but breast more chestnut, bill dull yellowish. (13,14) **Female:** Similar to several other female *Anas* ducks. Distinguished by combination of relatively large size, elongated shape, dull orange to dull reddish bill with dark brown markings (not distinctly bicoloured), contrasting dark crown and eyestripe and, in flight, wing colour and pattern (like male but upperwing-coverts browner). **Juvenile:** As female but crown/eyestripe blackish, breast neatly streaked, flanks more streaked (less scaled), bill initially mostly dull reddish to dull orange. **VOICE** Male utters a rasping *kreep*; female gives series of mocking quacks, descending towards end: *QUACK-QUACK-QUACK-quack-quack-quack...* **HABITAT** Lakes, large rivers, various wetlands; up to 400 m.

NORTHERN SHOVELER *Anas clypeata* 43–52 cm



(15,16) **Male:** Long, wide, spatula-shaped bill, glossy green hood, white breast, mostly chestnut sides. Has yellow eyes, white patch on sides of vent and black tail-coverts. In flight, shows distinctive blue median/lesser upperwing-coverts, broadly white-tipped secondaries, glossy green secondaries and contrasting white underwing-coverts. (17) **Male eclipse:** Like female but flanks/belly more rufous, body markings blacker, upperwing-coverts bluer. (18,19) **Female:** From other scaly brown *Anas* ducks by distinctive bill, greyish-blue median and lesser upperwing-coverts and broadly white-tipped greater coverts. Eyes usually brown. **Juvenile male:** Like juvenile female but upperwing similar to adult. Immatures can resemble sub-eclipse adults. **Juvenile female:** Like adult but crown and nape darker, underparts paler and more spotted, greater covert bar indistinct, lacks obvious gloss on secondaries. **VOICE** Courting male utters a repeated, liquid, hollow *sluk-uk* or *g'dunk*; female gives a descending *gak-gak-gak-ga-ga*. **HABITAT** Lakes, large rivers, marshes, various wetlands; up to 400 m.

NORTHERN PINTAIL *Anas acuta* 51–56 cm (male's tail up to 10 cm more)



(20,21) **Male:** Slender and long-necked, predominantly grey; dark chocolate-brown hood, white line from head-sides down neck to whitish lower foreneck/upper breast, yellowish-white patch on rear flanks, black tail-coverts. Has relatively long slender grey bill with blackish median stripe and distinctive elongated central tail feathers. In flight, shows grey upperwing-coverts, rufous-buff tips to greater coverts, glossy blackish-green secondaries with broad white tips and mostly greyish underwing with blackish median and lesser coverts. (22,23) **Female:** Slender proportions, longish neck, long darkish grey bill, rather plain head, distinctly pointed tail. In flight shows distinctive greyish underwing with dark median/lesser coverts and white-tipped secondaries. Upperwing-coverts duller than male, secondaries much duller/browner, tips of greater coverts whiter. **Male eclipse:** Like female but greyer above, has grey tertials; retains bill and wing colour and pattern. **Juvenile:** Like female but upperparts darker, flanks more boldly patterned. **VOICE** Male gives a low *preep-preep*; female utters weak descending quacks and low growling croaks when flushed. **HABITAT** Lakes, large rivers, marshes, various wetlands; up to 400 m.

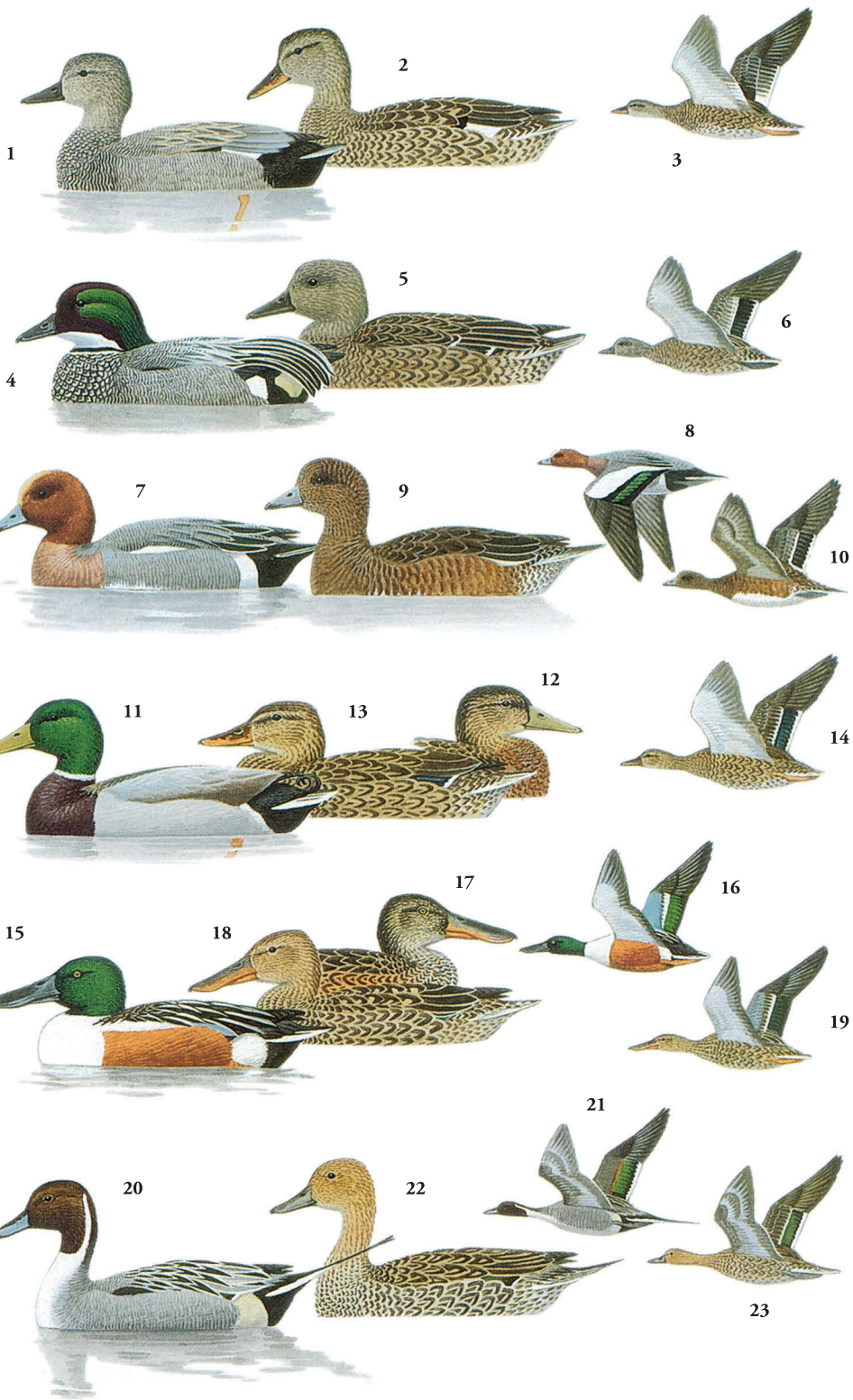
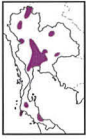


PLATE 6 COTTON PYGMY-GOOSE, DABBLING DUCKS & SCALY-SIDED MERGANSER

เพลท 6 เป็ดคับแค, เป็ดที่ว่ายหากินบนผิวน้ำ และเป็ดปากยาวข้างลาย

COTTON PYGMY-GOOSE *Nettapus coromandelianus* 36 cm



(1,2) **Male** *coromandelianus*: Small; blackish cap, breast-band/collar, upperparts (glossed green) and vent, white head-sides/neck and underparts, grey-washed flanks; rounded wings with broad white band. (3,4) **Female**: Black eyestripe, duller/browner above, duller neck/underparts, with darker mottling (particularly breast), no defined breast-band/collar, pale vent; dark wings with narrow white trailing edge to secondaries. **Male eclipse**: Greyish-washed head-sides/neck, darker eyestripe, greyish-mottled breast and flanks, no obvious breast-band/collar. Retains distinctive wing pattern. **Juvenile**: Like female but sides of head less white, eyestripe broader, lacks any obvious gloss on upperparts. **VOICE** Male has a staccato cackling *WUK-wirrararak-WUK-wirrararak-WUK-wirrararak...*, usually in flight; female gives a weak *quack*. **HABITAT** Lakes, marshes and other freshwater wetlands; up to 800 m.

MANDARIN DUCK *Aix galericulata* 41–49 cm



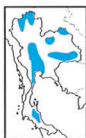
(5) **Male**: Big head, pinkish-red bill (tip pale), broad whitish supercilium, orange-rufous fan of pale-streaked 'hackles' on lower head-sides, erect pale-tipped orange-rufous wing 'sails', white bands on sides of black breast. (6,7) **Female**: Greyish head, white 'spectacles', rather full nape/hindneck, dark greenish-brown above, white throat, belly centre and vent, dark brown breast/flanks with heavy whitish streaks/mottling, pink-tinted dark greyish bill with pale tip. In flight, upperwing quite uniform with white-tipped greenish secondaries. (8) **Juvenile**: Duller and browner overall than female, particularly head, with less pronounced 'spectacles' (sometimes lacking) and more diffuse markings on breast and flanks. **Male eclipse**: Similar to female but bill reddish, 'spectacles' less pronounced, neck feathers shaggier, upperparts glossier. **VOICE** Usually silent. **HABITAT** Freshwater lakes and pools; up to 400 m.

SPOT-BILLED DUCK *Anas poecilorhyncha* 55–63 cm



(9,10) **Male** *baringtoni*: Recalls some female *Anas* ducks but has pale, rather plain head/neck, contrasting blackish crown/eyestripe, blackish bill with broad yellow tip, red loreal spot at bill-base, mostly whitish outer webs of longest two tertials. Much of body prominently scaled/mottled. In flight, shows green secondaries, bordered at front/rear by black and white band, sharply contrasting white tertials/underwing-coverts. **Female**: Somewhat smaller; red loreal spot indistinct (or absent), usually smaller and less distinct breast and flank markings. **Juvenile**: As female but browner and less distinctly marked below, no red on lores. **VOICE** Descending series of *quark* notes. **HABITAT** Lakes, large rivers, marshes; up to 400 m.

GARGANEY *Anas querquedula* 36–41 cm



(11,12) **Male**: Relatively small; mostly dark brownish head and neck with blacker crown and pronounced long white supercilium. Rest of plumage brownish-grey with distinctly pale grey, dark-vermiculated flanks and elongated, grey scapulars with long black and white streaks. In flight shows mostly bluish-grey upperwing-coverts and glossy blackish-green secondaries, bordered at front and rear by broad white band. (13,14) **Female**: Relatively small with bold head pattern. Has dark crown,

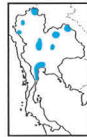
narrow whitish supercilium, bold dark eyestripe, large whitish loreal patch continuing in narrow line below blackish eyestripe, dark cheek-bar and whitish throat. Centre of belly extensively whitish. In flight, shows grey tinge to upperwing-coverts, mostly dark brownish secondaries (little green gloss), bordered at front and rear by narrow white band and distinctly dark leading edge to underwing-coverts. (15) **Juvenile**: Darker than female with less defined head pattern; dark markings on belly. **Male eclipse**: As female but no defined white line below blackish eyestripe, throat whiter; retains wing colour and pattern. **VOICE** Male utters rattling *knerek*, female a short high *quack*. **HABITAT** Lakes, marshes, various wetlands; up to 400 m.

BAIKAL TEAL *Anas formosa* 39–43 cm



(16) **Male**: Striking buff, green, white and black head pattern, dark-spotted pinkish breast, grey flanks with vertical white band at front and rear, black undertail-coverts. In flight, from Common Teal as female. (17) **Male eclipse**: As female but darker/warmer mantle fringing, breast/flanks warmer, loreal spot less distinct. (18,19) **Female**: From Garganey by isolated round white loreal spot, vertical whitish band from below/behind eye to throat, broken supercilium (more buffish behind eye), buffish-white line at side of undertail-coverts. In flight, from Common Teal by rufescent-tipped greater coverts (often hard to see), blacker leading edge to underwing-coverts. (20) **Juvenile**: As female but buffier and slightly larger loreal spot; dark mottling on whitish belly (plain-centred on adult female). **VOICE** Male gives chuckling *wot-wot-wot...*, female has a low *quack*. **HABITAT** Freshwater lakes; up to 400 m.

COMMON TEAL *Anas crecca* 34–38 cm



(21) **Male** *crecca*: Small; chestnut head with buff-edged dark green eye-/nape-patch, buffish patch on blackish vent; horizontal white scapular line. Wing pattern like female but upperwing-coverts greyer. (22,23) **Female**: Like Garganey but smaller/smaller-billed (often some dull flesh/orange at base), head rather plain, apart from darker crown/eyestripe; has narrow buffish-white line along side of undertail-coverts, and more restricted whitish belly-centre. In flight, broad white tips to greater coverts, narrow white tips to dark green secondaries, greyish underwing with somewhat darker leading edge and white axillaries/band across coverts. **Male eclipse**: As female but darker/more uniform above, larger dark markings below, eyestripe faint/absent. **Juvenile**: As female but somewhat plainer above, belly speckled dark; may show darker area on ear-coverts. **VOICE** Male utters soft, liquid *preep-preep...*; female may give sharp high *quack* when flushed. **HABITAT** Lakes, large rivers, marshes, various wetlands; up to 400 m.

SCALY-SIDED MERGANSER *Mergus squamatus* 52–58 cm



(24,25) **Male**: Spiky crest, flanks white with pointed dark grey scales, greater coverts tipped black; large white upperwing-patch is bisected by two black lines. (26,27) **Female**: Spiky crest, ill-defined whitish throat, dark grey scaling on white sides of breast/flanks; white wing-patch bisected by single dark line. **Male eclipse**: Similar to female but darker above; retains wing pattern. **Juvenile**: As female but flanks may be more uniformly grey. **VOICE** Usually silent. **HABITAT** Large rivers, lakes; up to 500 m.

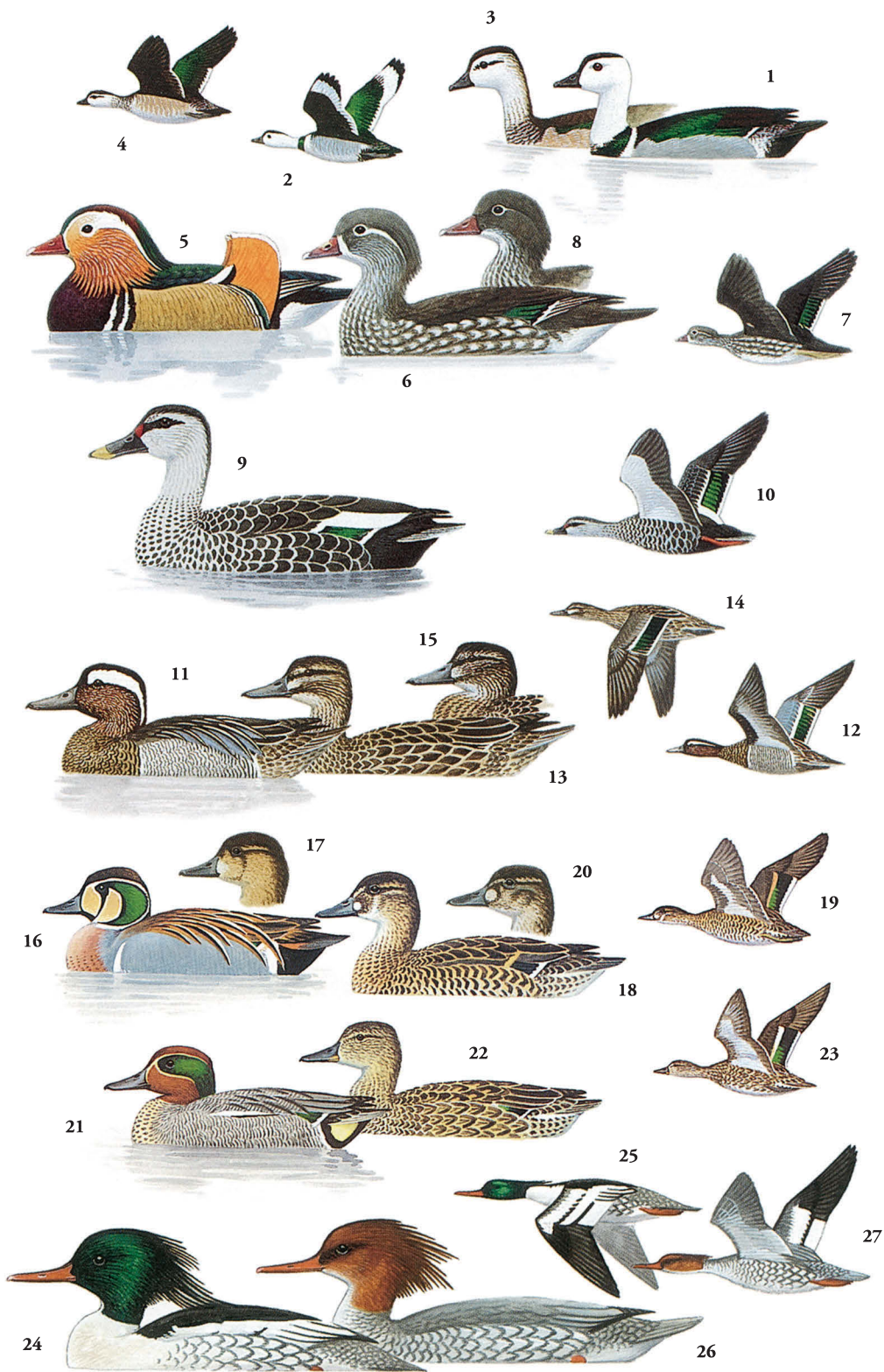


PLATE 7 DIVING DUCKS & GREBES

เพลท 7 เป็ดที่ดำน้ำหากิน และ เป็ดผี

RED-CRESTED POCHARD *Rhodonessa rufina* 53–57 cm



(1) **Male:** Red bill, bulky orange-rufous head, black breast, tail-coverts and vent, broad white flank-patch. (2,3) **Female:** Plain brownish with dark crown (extending round eye), contrasting whitish head-sides to upper foreneck, pink-tipped dark bill; relatively pale brown upperwing-coverts, broad whitish band across flight feathers, largely whitish underwing (male's wing pattern similar but upperwing-coverts darker brown). **Male eclipse:** Like female but bill red, eyes reddish. **Juvenile:** Like female but bill all dark. **voice** Usually silent. Courting male gives a rasping wheeze; female has a grating chatter. **HABITAT & BEHAVIOUR** Freshwater lakes and marshes, large rivers; up to 400 m. Primarily feeds by diving, sometimes by up-ending and head-dipping.

COMMON POCHARD *Aythya ferina* 42–49 cm



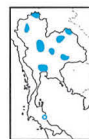
(4) **Male:** Plain chestnut head and upper neck, rather plain grey remainder of plumage with contrasting black lower neck, breast and tail-coverts. Bill blackish with broad pale bluish-grey central band. In flight, upperwing like female but coverts purer grey. (5) **Male eclipse:** Duller and browner-tinged overall. (6,7) **Female non-breeding:** Told by combination of peaked head, pale spectacles and facial/throat markings, dark eyes, mottled greyish-brown body, dark undertail-coverts; distinctive greyish upperwing, without white band. **Female breeding** Body somewhat plainer and browner, sides of head somewhat plainer. **Juvenile:** Generally duller than female with more uniform upperparts, all-dark bill and much plainer head (may lack obvious spectacles). **voice** Female sometimes utters a harsh **kerrr** or **kerrab**; courting male may give a repeated soft wheezy whistled **pee**. **HABITAT** Freshwater lakes; up to 400 m.

FERRUGINOUS POCHARD *Aythya nyroca* 38–42 cm



(8) **Male:** White eyes, rich chestnut (domed) head, neck, breast and flanks, blackish upperparts and sharply demarcated white undertail-coverts diagnostic. In flight, upperwing has more extensive white bar across flight feathers than other *Aythya* ducks, white belly-centre sharply defined. (9,10) **Female:** Duller, more chestnut-brown, eyes dark. **Male eclipse:** Like female but head, neck and breast somewhat brighter; retains white eyes. **Juvenile:** Like female but sides of head, foreneck, flanks and upperparts somewhat paler, belly and sides of undertail-coverts mottled brown. **voice** Usually silent. Courting male has a short **chuk** and soft **wheooo**; female utters a snoring **err err err...** and harsh **gaaa**. **HABITAT** Freshwater lakes and marshes, large rivers; up to 400 m.

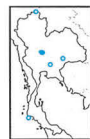
BAER'S POCHARD *Aythya baeri* 41–46 cm



(11) **Male:** Told by combination of glossy greenish-black hood, whitish eyes, blackish upperparts, rich chestnut-brown lower neck/breast, chestnut-brown sides with large white patch on foreflanks, white undertail-coverts. In flight, wing pattern like Ferruginous but white upperwing-band extends less onto outer primaries. (12,13) **Female:** Similar to male but hood dark brown, typically has large diffuse dark chestnut loreal patch, eyes dark, often has some whitish mottling on throat, duller breast/flanks, smaller white patch on foreflanks (may not

be visible when swimming). Combination of domed head without nuchal tuft, contrast between dark head and warm brown breast, and presence of white on foreflanks rule out Ferruginous and Tufted Duck. **Male eclipse:** Similar to female but eyes whitish. **Juvenile:** Similar to female but head tinged more chestnut with darker crown and hindneck; no defined loreal patch. **voice** Usually silent. **HABITAT** Lakes, large rivers and their deltas; up to 400 m.

TUFTED DUCK *Aythya fuligula* 40–47 cm



(14) **Male:** Blackish plumage, contrasting white flanks, drooping crest. Bill grey with whitish subterminal band and black tip, eyes yellow, head glossed dark purplish. In flight, upperwing has less extensive white bar across flight feathers than other *Aythya* ducks. (15) **Male eclipse:** Crest reduced; head/breast and upperparts more brownish-black, flanks greyish, bill duller. (16–18) **Female:** Told by rather uniform dull dark brownish plumage with paler lower neck/breast and particularly flanks, squarish head, usually with suggestion of crest (short tuft/bump), yellow eyes and upperwing pattern (like male). May have white undertail-coverts, recalling Ferruginous/Baer's Pochards, or white face-patches. Bill duller than male. **Juvenile:** Similar to female but head and upperparts somewhat lighter brown (crown dark), has pale area on lores, little or no sign of crest and browner-tinged eyes (particularly female). **voice** Female sometimes gives a low gruff growling **err err err...**; courting male utters a low vibrant whistled **wheep-wee-wheew**. **HABITAT** Lakes, large rivers; up to 400 m.

LITTLE GREBE *Tachybaptus ruficollis* 25–29 cm



(19,20) **Adult non-breeding** *pogget*: Small, stocky and duck-like, puffed-up rear end, rather narrow, mostly pale bill. Brownish-buff head-sides/underparts (throat and vent whiter) contrast with dark brown crown, hindneck and upperside. Eyes dark. In flight, upperwing all dark with narrow whitish trailing edge to secondaries. (21) **Adult breeding:** Sides of head, throat and foreneck dark rufous-chestnut, flanks rich dark brown, eyes yellow, bill blackish with prominent yellow gape-skin. **Juvenile:** Similar to adult non-breeding but sides of head have dark brown stripes, neck and breast often tinged rufous. **voice** Territorial call is a shrill whinnying trill, recalling some *Porzana* crakes. Sharp **wit** notes when alarmed. **HABITAT & BEHAVIOUR** Lakes, pools, well-watered marshes; up to 800 m. Swims buoyantly, dives frequently.

GREAT CRESTED GREBE *Podiceps cristatus* 46–51 cm



(22,23) **Adult non-breeding** *cristatus*: Relatively large/long-necked, bill rather long/slender and pinkish, crown, hindneck and upperside blackish-brown, head-sides/neck and underparts white, black loreal stripe, greyish-brown flanks. In flight, long neck extends forwards, legs/feet protrude beyond short rear end, wings rather long/narrow, upperwing with contrasting white leading edge, scapular band and secondaries. (24) **Adult breeding:** Blackish crest, rufous-chestnut and blackish 'frills' on rear head-sides, rufous flanks. **Juvenile:** Similar to adult non-breeding but has brown stripes across head-sides. **voice** Usually silent. Gives harsh, rolling **aooorrr** and chattering **kek-kek-kek...** on breeding grounds. **HABITAT** Lakes, large rivers, coastal waters; up to 400 m.

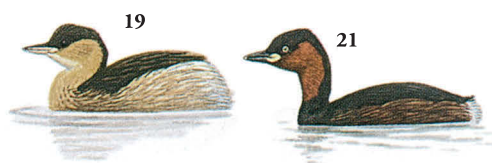
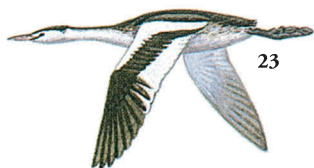
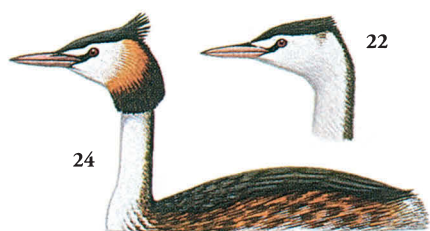
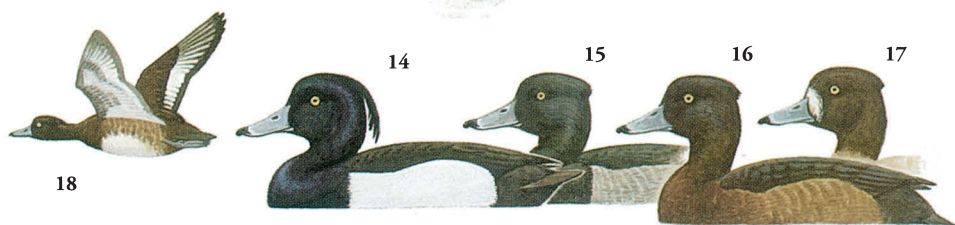
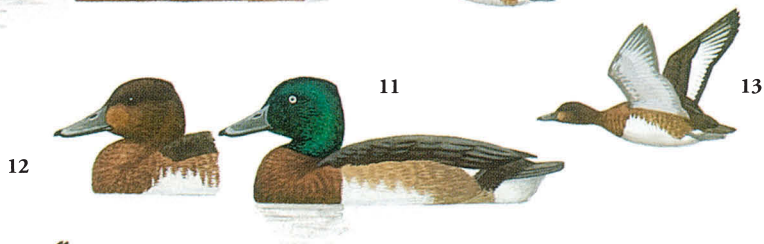
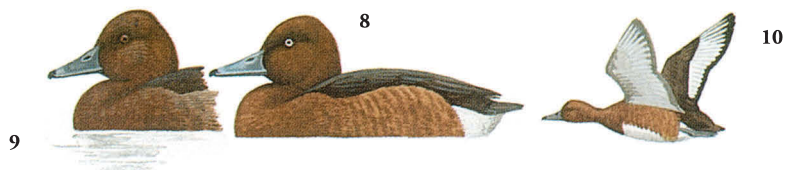
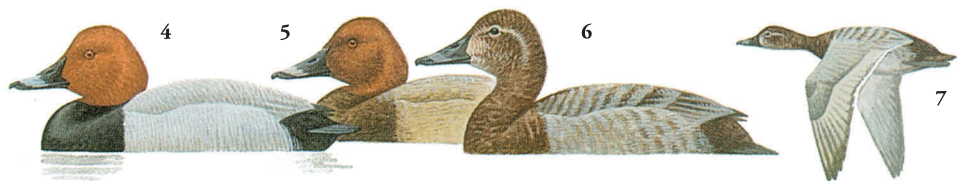
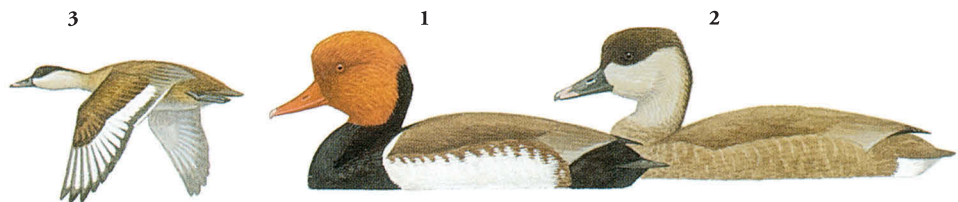
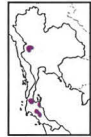


PLATE 8 MALAYSIAN HONEYGUIDE & PIED & SMALLER TYPICAL WOODPECKERS

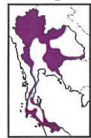
เพลท 8 นกพรานผึ้ง, นกหัวขวานสีขา-ดำ และ นกหัวขวานแท่นขนาดเล็ก

MALAYSIAN HONEYGUIDE *Indicator archipelagicus* 18 cm



(1) **Male:** Lemon-yellow shoulder-patch (often hidden; lacked by female), thick bill with paler lower mandible, deep red eye, dirty whitish underparts, greyish wash across breast, dark-streaked lower flanks. **Female:** Lacks shoulder-patch. **Juvenile:** Like female but underparts indistinctly streaked, eyes brown. **VOICE** Song is a mewling note followed by a nasal ascending rattle: *miaw-krrruuu* or *miaw-miaw-krrruuu*. **HABITAT** Broadleaved evergreen forest; up to 800 m. Sits motionless for long periods; visits bee nests.

GREY-CAPPED PYGMY WOODPECKER *Dendrocopos canicapillus* 13–15.5 cm



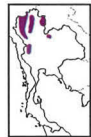
(2) **Male** *canicapillus*: Small; brownish-grey (black-bordered) crown, ear-covert band and washed-out submoustachial stripe; blackish above with white bars, dark-streaked below, short red streak on rear crown-side. (3) **Female:** No red on crown. **Juvenile:** Darker; heavier streaks below. Male often has more orange-red (not red) on nape/rear crown-sides. **Other subspecies** *D.c.delacouri* (south-eastern), *auritus* (S). **VOICE** Male territorial call is a rattling *tit-tit-erb-r-r-r-r-b*, usually introduced by call. Drumming fairly subdued. Short *kik* or *pit* and squeaky *kweek-kweek-kweek*. **HABITAT** Various broad-leaved forests, coastal scrub; up to 1,830 m.

FULVOUS-BREASTED WOODPECKER *D. macei* 17–18 cm



(4) **Male** *longipennis*: Red crown, black nape, barred above, whitish below with streaks/bars, pinkish vent. (5) **Female:** Crown and nape all black. **Juvenile:** Duller, pink/red of undertail-coverts paler/more restricted, both sexes have some red on crown-centre (particularly male). **VOICE** Male territorial call is rapid *pik pipipipipipipipipi*. Drumming short and weak. Call is a loud *tbik* or *pik* (sharper than Grey-capped Pygmy), soft *chik-a-chik-a-chit* and sometimes *pik-pik*. **HABITAT** Deciduous woodland, scattered trees in open country, gardens, plantations; up to 600 m.

STRIPE-BREASTED WOODPECKER *D. atratus* 21 cm



(6) **Male:** Upper mantle unbarred, uniformly and distinctly streaked below, base colour of belly dusky buffish golden-brown. Note habitat and range. (7) **Female:** Like male but crown and nape black. **Juvenile:** Much paler and greyer below with less distinct streaks on belly and paler, more flame-red undertail-coverts. Male has paler red on crown, female some red on centre of crown. **VOICE** Male territorial call is a whinnying rattle. Call is a loud *tbik*. **HABITAT** Broadleaved evergreen forest; 800–2,200 m.

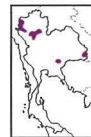
YELLOW-CROWNED WOODPECKER *Dendrocopos mabratensis* 17–19 cm



(8) **Male** *aurocristatus*: Brownish-yellow fore-crown grades to red hindcrown, dense white bars/spots above, no blackish head markings, brown streaking on underparts, red belly-centre, no red on undertail-coverts. (9) **Female:** Yellowish-brown hindcrown. **Juvenile:** Browner above, diffuse

streaks below, pinker belly-patch. Male has some orange-red on hindcrown, female some on crown-centre. **VOICE** Rapid *kik-kik-kik-r-r-r-r-b* territorial call. Drums. Calls with sharp *click-click* and weak *peek* notes. **HABITAT** Deciduous woodland, scattered trees in open country; lowlands.

RUFIOUS-BELLIED WOODPECKER *Dendrocopos hyperythrus* 19–23 cm



(10) **Male** *hyperythrus*: Red crown and nape, whitish face, deep rufous underparts, red undertail-coverts. (11) **Female:** Crown and nape black with white speckles, vent paler red. **Juvenile:** Dark streaks on head-sides, duller/paler below with heavy blackish bars. Both sexes have orange-red tips to crown feathers (less on female); subadults have blackish bars and whitish mottling on throat/breast. **Other subspecies** *D.b.annamensis* (NE): Paler rufous head-sides/underparts, less red on nape. **VOICE** Male territorial call is a rattling *ki-i-i-i-i-i* or *chit-chit-chit-r-r-r-r-b*. Both sexes drum. Calls with fast *ptikittititit...* and *tik-tik-tik-tik...*. **HABITAT** Open oak and pine forest, mixed broadleaved evergreen/coniferous forest, locally deciduous forest; 600–1,200 m.

CRIMSON-BREASTED WOODPECKER *Dendrocopos cathpharius* 17–17.5 cm



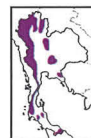
(12) **Male** *tenebrosus*: All-black mantle and scapulars, large white wing-patch, red hindcrown and nape, heavy dark underpart-streaks, red breast-patch and undertail-coverts. (13) **Female:** Black hindcrown and nape, red breast-patch duller and smaller. **Juvenile:** Duller above, whiter below with diffuse streaks, no red on breast, red of undertail-coverts paler/lacking, orange-red on hindcrown/nape (less on female). **VOICE** Male territorial call is a fast, descending rattle. Also drums. Calls are loud *chip* or *tbik* and shrill *kee-kee-kee*. **HABITAT** Broadleaved evergreen forest; 1,600–1,800 m.

PALE-HEADED WOODPECKER *Gecinulus grantia* 25 cm



(14) **Male** *indochinensis*: Mainly maroon-chestnut above, pinkish-red crown-centre, bars on wings and tail. (15) **Female:** No red crown-patch. **Juvenile:** As female but mostly dark brown above, very dark brown/grey-brown below. **VOICE** Territorial call recalls Bay: loud laughing *yi wee-wee-wee*. Drums in loud, even bursts. Harsh high *grrrit-grrrit-grrrit* and *grridit grrit-grrit...* etc. **HABITAT** Bamboo, broadleaved evergreen and semi-deciduous forest; recorded at c.400 m.

BAMBOO WOODPECKER *Gecinulus viridis* 25–26 cm



(16) **Male** *viridis*: Greyish-olive above, red mid-crown/nape, red on rump/uppertail-coverts, olive-brown below. (17) **Female:** Pale yellowish-green head. **Juvenile:** Like female but darker/browner above, very dark, often grey-tinged below. **Other subspecies** *G.v.robinsoni* (S). **VOICE** Territorial call is a shrill monotone *kyeek-kyeek-kyeek-kyeek; keep-kee-kee-kee-kee-kee-kee* or *kwi-kwi-week-kweek-kweek*. Drums in short loud bursts. Also, similar cackling to Bay, but slower and occasional *bik* notes. **HABITAT** Bamboo, broadleaved evergreen and deciduous forest; up to 1,400 m.



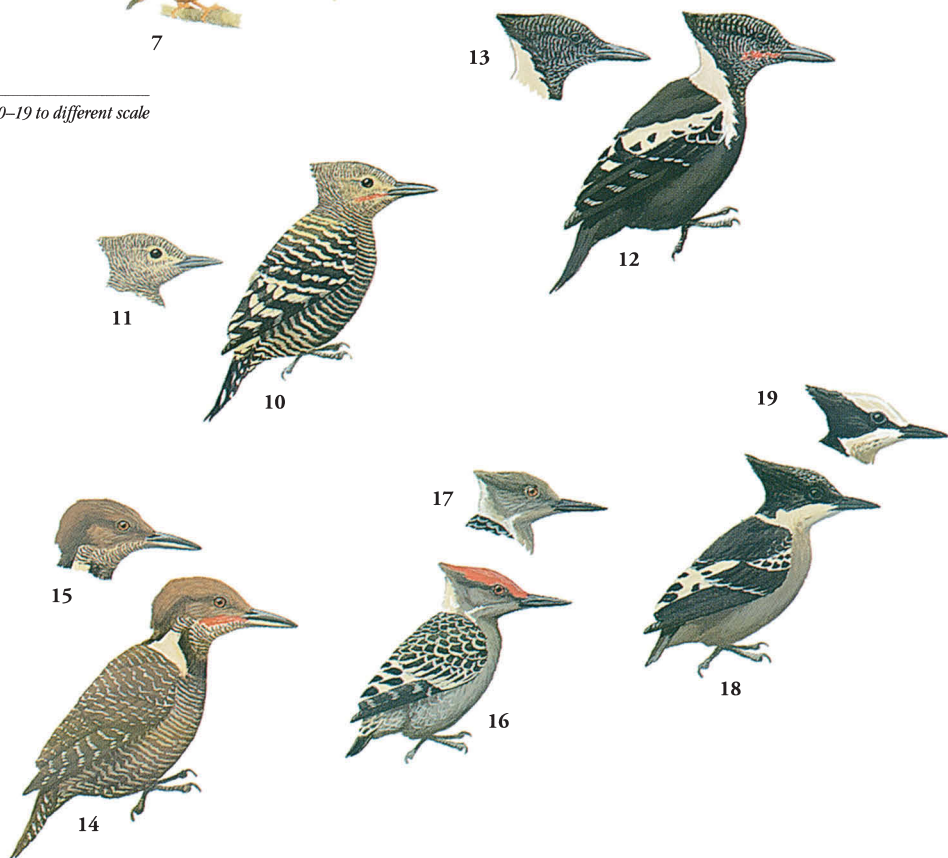
เพลท 9 นกคอปัน, นกหัวขวานจิ๋ว และ นกหัวขวานแท็กซี่ขนาดเล็ก

A map of the Pacific Northwest region of the United States, including parts of Washington, Oregon, and California. A specific area in the northern part of Washington state is highlighted in blue, indicating the location of the study area.

Male territorial call is a repeated series of clear, ringing notes, each falling in pitch at end: *quee-quee-quee-quee-quee...* Otherwise gives repeated *tak* or *kek* notes. HABITAT & BEHAVIOUR Open dry country, secondary growth, scrub and grass, cultivation; up to 2,000 m. Often feeds on ground, sits motionless for long periods, particularly when disturbed.



10–19 to different scale



เพลท 10 นกหัวขวานแท้นขนาดใหญ่

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