

West African Ornithological Society Société d'Ornithologie de l'Ouest Africain



Join the WAOS and support the future availability of free pdfs on this website.

http://malimbus.free.fr/member.htm

If this link does not work, please copy it to your browser and try again. If you want to print this pdf, we suggest you begin on the next page (2) to conserve paper.

Devenez membre de la SOOA et soutenez la disponibilité future des pdfs gratuits sur ce site.

http://malimbus.free.fr/adhesion.htm

Si ce lien ne fonctionne pas, veuillez le copier pour votre navigateur et réessayer. Si vous souhaitez imprimer ce pdf, nous vous suggérons de commencer par la page suivante (2) pour économiser du papier.

BREEDING RECORDS FOR THE PLATEAU PROVINCE OVER 3,000 FEET, 1957-1966

V.W.Smith

During nine years residence at Vom, Plateau Province, the following observations were made on the breeding of some of the local species; some of these records have already appeared (with photographs) in the Nigerian Field (Smith, 1962; 1964). This paper represents a condensation of all the records collected during the nine years.

With some species sufficient information has been obtained to justify specifying the period when breeding is at its height; in these cases the months when eggs or young can be expected to be found are shown at the beginning. With other species I have very scanty information, but sufficient to justify inclusion as a breeding species. This list is by no means complete. Of the approximately 330 species shown in the Provisional Check-list (Ebbutt et al., 1964) and subsequent additions, some 35% are shown here, some 25% are Palaearctic species or occasional visitors to Plateau Province; of the remaining 40%, many must breed on the Plateau and have so far been overlooked. Although I have no positive records of these species, I can say that many are present on the Plateau throughout the year and probably do breed.

Abbreviations:

C = clutch; B = brood; Juv. = juveniles (usually free-flying, but immature). Months are designated by Roman numerals, thus :- 'C2/3.iv' means a clutch of two eggs on 3rd April. Measurements of all eggs are shown in millimetres.

For a brief description of the locality encompassed by this paper and the climate, see Ebbutt et al. (1964).

Systematic List

Poliocephalus ruficollis African Little Grebe

Extended breeding season, Aug.-Feb. On permanent water (mining dams) very young birds have been seen with adults as late as end of Feb.; B2/3.xi; Bll (half-grown) + 3 adults/14.xi; B2/29.ii; on a wet season pool (dry by mid-Oct.) one pair built their floating nest in reeds growing in 4 ft. water at end of Aug.; the eggs were always covered; newly-hatched young (B6) were first seen 24.xi.

Ardeola ibis Cattle Egret

May-Aug. Only two colonies known, both in villages and neither South of 9° N.; one near Jos, and ore on the Zaria road. Many young seen at the second colony 4.vii.

Butorides striatus Green-backed Heron

One stick-nest in willows low over water at Pan Yam, C3/22.viii; first young 23 viii; from about tenth day young spend day in the branches, returning to nest at night.

Scopus umbretta Hammerkop

Pairs (both sexes build) seen building Apr.-June; Aug.-Nov. The enormous nest, usually placed in a low fork of a stout tree, though two nests seen on rocks, takes weeks to build; nests at end of wet season may be usurped by Barn Owls Tyto alba.

Sphenorhynchus abdimii Abdim's Stork

Bird seen at nest in village 14.v.

Dendrocyma viduata White-faced Duck

July-Nov. Probably builds nest in swampy ground near water. Female contained shelled egg 26.viii; young seen Aug.-Nov.; B4 (2-3 weeks old)/31.viii; Bl2(very young)/17.ix; B6 (1 week old)/21.ix; B4/12.x; B8/3.xi.

Plectropterus gambensis Spur-winged Goose

Pairs seen latter part of wet season in vicinity of secluded.

Necrosyrtes monachus Common Vulture

Nov. -March. Untidy nests of sticks in tree or palm. Well grown young (usually one) seen Feb. and March in nest.

Falco biarmicus Lanner

Mar.-May. Rock ledges, C4/2.iv; sitting/16.iii (Ebbutt, 1964).

Falco tinnunculus African Mountain Kestrel

One juv. caught 26.vii.

Falco ardosiacous Grey Kestrel

One seen in hollow stem of broken <u>Borassus</u> palm at Pan Yam; food seen carried 25.iv; the following year both adults seen at same nest 13.iii.

Milvus migrans Black Kite

Dec.-May. Building commences in December; stick nest usually in high fork of tree; B2/12.iii-6-v.

Aquila rapax Tawny Engle

One very large stick nest high in isolated tree used four consecutive years; adults returned to site and repaired old nest in September. Bird citting on nest seen many times 10. xi-21.xii. Bl (full-grown)/8.iii.

Aguila wahlbergi Wahlberg's Eagle

Pair seen at stick nest high in tree in forestry reserve.

Kaupifalco monogrammicus Lizard-Buzzard

April-June. Stick nests high in canopy of <u>Eucalyptus</u> at Rayfield; juv. seen in May.

Butastur rufipennis Grasshopper-Buzzard

One juv. caught in Vom, 1.vi.

Buteo auguralis Red-tailed Buzzard

Feb.-April. Adults return to same site annually in November. One stick nest in fork of <u>Eucalyptus</u> at no great height; another at base of tree growing from rock face. Copulation observed at end of January and mid-April; adults seen sitting many times at both nests in March; feeding of young seen in April.

Francolinus bicalcaratus Double-spurred Bush-Fowl

Oct.-Nov. One female contained shelled egg (buff colour) 5.x. Many broods seen in November; four to nine per brood.

Crecopsis egraria African Crake

July-Oct. Grass nest in tuft of grass in wet ground near swamp, C5/14.vii; eggs dirty white with numerous brown spots and blotches. Downy young are black; B3/6.x.; B4+(very young)/25.x.

Gallinula angulata Lesser Moorhen

Aug.-Sept. Floating nest attached to sedges in water 2-3 feet deep. In one small wet-season pool an acre in extent, at least three pairs. C6/12.viii; C5/3.ix; C8/8.ix; eggs buff spotted reddish brown; earliest young seen 8.ix.

Balearica pavonina Crowned Crane

July-Sept. (Walkinshaw, 1966).

Neotis denhami Denham's Bustard

Though no nests or young found, an adult was seen feigning injury near Kuru peak 30.iii.

Eupodotis senegalensis Senegal Bustard

C2/6.x.; eggs measured 50 x 38; 53 x 38.5. laid on bare ground in patch of atcha. Only female seen at nest.

Lissotis melanogaster Black-bellied Bustard

June-Sept. Female contained shelled egg 20.viii; egg almost spherical, 60 x 53, dark olive green with flecks and blotches of grey, fawn and dark brown. Cl/30.viii, laid on bare ground, hatching 14.xi. Bl(6 weeks old)/ll.viii; Bl(48 hours old)/19.ix. In one half-acre patch of grass two young chicks (each a few days old)

were seen with TWO females in attendance, 30.viii. Males have never been seen near the nest - probably polygamous.

Actophilornis africanus Lily-Trotter

l juv. seen 26. viii at Pan Yam.

Afroxyechus forbesi Forbes' Banded Plover

Display and skulking behaviour seen May and June; one juv. seen mid-August.

Hoplopterus spinosus Spur-winged Plover

April-May. C4/5.iv, shallow scrape in mud adjacent to fishtank at Pan Yam; eggs very muddy but fresh. In same locality, young present in May.

Afribyx senegallus Senegal Wattled Plover

May. Nest of pebbles on bare ground, often near water or marshy ground. Eggs found 2.v.-19.vi; clutch two to four. Young nest-lings found 15.v-2.vi.

Cursorius temminckii Temminck's Courser

Non-flying juv. seen 7.vi and also mid-August.

Columba guinea Speckled Pigeon

Oct.-Feb. Chimneys, under eaves, also probably rock ledges and palms. C2/4.x; C2/26.xi; C2/3.i; B2(full grown)/22.ii.

Streptopelia semitorquata Red-eyed Turtle-Dove

Sept.-Nov. Flimsy nest, 2-12 ft. up, usually over water. C2/12. ix; C2/24.ix; C2/1.xi. Earliest young B2/7.ix; fledging period). 2½ weeks. Two eggs measured, 29 x 22; 30 x 23.

Streptopelia hypopyrrhus Adamawan Turtle-Dove

Sept.-Nov. Flimsy nest, 5-15 ft. up, sometimes over or near water. C/C2/24.ix; C2/3.xi; B2/23.ix; B2/30.x (see also Lang, 1966).

Streptopelia vinacea Vinaceous Turtle-Dove

Sept.-Dec. Birds seen building as early as August. One nest in broad fork of Eucelyptus; another in low bush; 3-12 ft. up. C2/20. xii; B2/13.xi.

Stigmatopelia senegalensis Laughing Dove

Oct.-Dec. (Probably throughout dry season). Flimsy nest, usually in tree, 2-20 ft. up, sometimes under eave or on verandah wall. Total nesting period about 30 days. Often double brooded. C2/1.x; C2/5.x; C2/6.x; C2/30.x; C2/2.xi; C2/12.xi; C2/21.xi; C2/23.xi; C2/26.xi; C2/27.xi; C2/26.xii. B2/29.x. Four eggs measured 26 x 19-20.

Oena capensis Long-tailed Dove.

Nov.-Dec. Very flimsy nest of grass and rootlets, 1-3 ft. up, usually in sparse thorn bush. C2/3.xi; B2/28.xi. Eggs creamy-buff, 20-21 x 16; incubation about 14 days; fledgling period about 18 days.

Tyto alba Barn Owl

Dec.-Feb. Nests in chimneys and under eaves; rock cleft; hole in tree; sometimes old Hammerkop nest. Very noisy during breeding. Eggs 3-5, hatch at 2-day intervals. Food mainly rodents. Young in nest seen between 25.xii and 17.i.

Asio capensis Marsh Owl

· Oct.-Dec. (see Smith & Killick-Kendrick, 1964; Smith 1964a).

Bubo africanus Spotted Engle-Cwl

Jan.-March. On rock ledge; under eave. Broods of two, three and five seen in January.

Crinifer piscator Grey Plantain-Fater

Stick nest high in canopy of tree contained young, 14.v.

Centropus grillii Black-bellied Coucal

Pairs seen in swampy ground amid dense vegetation during wet season; three juv. seen in September.

Centropus senegalensis Senegal Coucal

Stick and grass domed nest, mud lined, in dense bush, 3-10 ft. up. C3/24.vii; C2/27.vii. First nestlings seen 6.viii, though free-flying juv. seen earlier, 3.viii.

Colius striatus Bar-breasted Mouse-Bird

Cupped nest in fork of orange tree, 6 ft. up, C3/7.iv.

Scotornis climacurus Long-tailed Nightjar

On bare rock, Cl/23.v. Egg creamy white with brown markings.

Micropus caffer White-ramped Swift

Feather nest under eave, possibly usurped; young fed second half April.

Colletoptera affinis Little Swift

April-May; Oct-Nov. Colonies under eaves. Early April great activity in colony; also in November, pairs building, sitting and many feeding young.

Cypsiurus parvus Palm Swift

Activity around Borassus palms seen during August and February.

Upupa senegalensis Senegal Hoopoe

Jan.-March. One nest in hole very low in dry-stone wall observed mid-January to end of February. Probably also nests in holes in rocks and underground in termite heaps. Male feeds female when sitting and brooding, making frequent visits.

Number of eggs undetermined, but on two occasions in March and once on 3.iv a pair of adults have been seen feeding two free-flying juv., so average clutch probably two.

Ceryle rudis Pied Kingfisher ·

Jan.-March. Holes in bank at water's edge, either on mining dam or larger river. Feeding of young seen from beginning of February to mid-March.

Corythornis cristata Malachite Kingfisher

Juv. seen in September.

Ispidina picta Pygmy Kingfisher

Adult seen feeding juv. 18.v; nearby, a vacated hole in roadside ditch contained one infertile egg in nest chamber 14" from entrance.

Halcyon senegalensis Senegal Kingfisher

July-Aug. Old barbets' hole or swifts' nest under eave used; pair once seen prospecting occupied barbets' hole 23.vi. B2/3.viii. Fledgling period at least ten days.

Halcyon leucocephalus Grey-headed Kingfisher

March-May. Excavates hole in vertical bank. Territorial. Fresh holes seen 28.iii-22.iv; young heard in nests 27.iv-13.v. Free-flying juv. seen 9.iv.

Melittophagus bullocki Red-throated Bee-eater

Dec.-Feb. Colonies of holes in roadside cuttings or watercourses; young being fed in most holes of one colony at Assob on 21.i. Breeding finished by end of February.

Pogonornis dubius Bearded Barbet

2" hole 20 ft. up tree in garden; sitting 26.iii; feeding young 21.iv.

Lybius vieilloti West African Barbet

May-June. Singing in duet heard from early February throughout early wet season. 1%" hole excavated usually in rotten branch of tree, 7-18 ft. up. Hole may only be a few inches deep. Young fed in nest early June.

Pogoniulus chrysoconus Yellow-fronted Tinker-Bird

Call heard early February onwards throughout wet season. Hole (less than 1") excavated in dead wood (stump or garden trollis work), 6-10 ft. up. Fresh holes seen Feb.April.

Indicator indicator Black-throated Honey-Guide

Call heard throughout wet season. Several juv. seen or mistnetted during early and late wet season. May be parasitic on
Grey-headed Kingfisher in Vom vicinity; adults seen in close proximity to occupied nests of this bird.

Mesopicos goertae Grey Woodpecker

2" hole excavated in rotten wood, 20+ ft. up. Fresh holes seen in December. Juv. (usually two) seen in March.

Galerida cristata Crested Lark

Grass cup amongst tufts of grass. B2/27.xi; young out of nest 29.xii; however adults seen building as late as beginning of March.

Calandrella cinerea Red-capped Lark

Oct.-Dec. (Ebbutt, 1965; Smith, 1965).

Eremopteryx leucotis Chestnut-backed Finch-Lark

Well-concealed cup of fine grass against stone or grass tuft in rut, usually shaded. Cl/14.i; c3/21.i; Cl/31.i. Free-flying juv. seen in mid-February.

Macronyx croceus Yellow-throated Long-Claw

July-Oct. Untidy grass cup, well lined, in tufts of grass or herbage up to 1 ft. high. C3/6.vii; C1B2/24.vii. Free-flying juv. 26.viii. (See also Lang, 1965).

Pycnonotus barbatus Common Bulbul

April-May. Transparent cup of rootlets 7 - 30 ft. up in bush or tree, sometimes at extremity of branch. Seen building 6.iv; C1/21.iv; B2/17.iv; B3/26.iv; young in nest seen being fed until end of M_Ay .

Bradornis pallidus Pale Flycatcher

Juv. mist-netted during April.

Melaenornia edolioidea Black Flycatcher

One nested in an old Kurrichane Thrush's <u>Turdus libonyanus</u> nest 16 ft. up in broad fork of tree, sitting 27-31.v, then nest destroyed. (see Bannerman, 1953). Juv. seen 29.vi.

Batis senegalensis Senegal Puffback Flycatcher

March-April. Very small well-concealed cup (2" diam.) of gossamer and lichen on top of horizontal branch about 1" diam., 8-15 ft. up. Nest almost invisible from below. C2/22.iv; B2/9.iii.

Double-brooded.

Erannornis longicauda Blue Fairy Flycatcher

April-June. Delicate cup, sometimes at extremity of branch, up to 20 ft. up. Free-flying juv. (two on each occasion) seen 24.iv; 13.v; 29.v; young seen being fed in nest 4.vi.

Turdus libonyanus Kurrichane Thrush

April-June. Cup of grass and rootlets in fork of tree, as high as 15 ft. up. Sitting birds seen 25.iv; 9.v; C2/27.iv. Juv. out of nest seen 6.vi-19.vii.

Oenanthe houglini Red-breasted Chat

Jan.-March. Underground, in hole in old termites' nest or mammal burrow, or rock crevice. Building material seen carried 21.xii-21.i; feeding in nest 23.i-26.iii. Free-flying young seen early Feb., and end of March. Double-brooded. (See also McGregor, 1950).

Cercomela familiaris Red-tailed Chat

Cup of grass under flat rock, B3/4.iii. Free-flying juv. 16.iii.

Pentholaea albifrons White-fronted Black Chat

Cup of grass against rock, C2/22.iii, hatching 30.iii. (Correction to Lang, 1966a).

Thamnolaea coronata White-crowned Cliff-Chat

April-June. May use old swallows' or swifts' nest under rocky overhang or eave; sometimes a hole in wall or rock-face; sometimes constructs a nest in rock crevice. Eggs light blue with pale brown blotches; one measured 18.2 x 24.3. B3/14.iv; B2/21.iv; C3/21.v. Young require 15-16 days to fledge. (Smith et al., 1966).

Myrmecocichla aethiops Ant Chat

Hole excavated in side of well, mining prospecting pit or cutting, or side of open cast min working. Young seen being fed in holes second half May.

Cossypha noveicapilla Snowy-crowned Robin-Chat

April-July. Usually a well-concealed cup in thick bushes, up to 5 ft. up, but sometimes an exposed site as against bole of tree. B3/21.v; C2/30.vi; B1/27.v. Bird seen building as late as 3.vii. Free-flying young seen on 25.v.

Sylvietta brachyura Senegal Crombec

Deep woven cup suspended from creeper over verandah, B2/26.iii.

Cameroptera brevidaudata Grey-backed Cameroptera

April-July. Large leaves (Hibiscus or potato-creeper) sewn

together with gossamer and the pocket lined with grass; very well concealed, but often in creepers around house, 2-4 ft. up. Building seen earliest mid-April and once as late as September. Display and copulation seen 22.vi. C2/15.v; C2/3.vii; B2/13.vi. Probably double-brooded.

Cisticola juncidis Fan-tailed Warbler

Deep cup in low grass on fringe of swamp, B3Cl(infertile)/28.x.

Cisticola emini Rock-loving Grass Warbler

Cup of grass in dense spiny bush amongst rocks, 12.vii; C2/17.vii.

Heliolais erythroptera Red-winged Warbler

Two free-flying juv. mid-September (both mist-netted).

Hirundo aethioptica Ethiopian Swallow

Mud cup under rafter, one nest in June; at Pan Yam in sluices, 25.iv.

Hirundo rufula Red-rumped Swallow

Retort nest of mud (with tubular entrance protruding) against building or vertical bank or under bridge. Nests being built from November onwards. Free-flying young first seen late January.

Hirundo abyssinica Lesser Striped Swallow

April-June. Mud nest (with tubular entrance along wall) under eave or rock. Returns to same site annually. Building co-incides with first rain. Young seen being fed second half April; first free-flying young 30.iv; B3/19.v (second brood).

Lecythoplastes preussi Preuss' Cliff Swallow

About 50 pairs building under bridge, 25.iv.

Ptyonoprogne rufigula Red-throated Rock Martin

Pair seen building under eave 28.v. Many nests, old and new seen on buildings; pair feeding young at another similar site 5.vi-12.vi.

Ccrvinella corvina Long-tailed Shrike

Free-flying juv. seen early August and several mist-netted during September.

Laniarius barbarus Barbary Shrike

July-Aug. Untidy cup in danse thorny and almost inaccessible foliage, up to 15 ft. up. Many first-flying juy, seen in August, the earliest on 13.viii.

Tchagra senegala Black-crowned Tchagra

Display seen 10. vii. Nest very sparsely built, 2½ ft. up in low bush, C2/25. vii.

Corvus albus Pied Crow

April-July. Stick nest usually in high fork of tree, but sometimes on rock. Frequentry try to build on electricity pylons in treeless country, thogun nests removed by E.C.N. staff (Lang, pers. comm.). Pairs building first seen end of March; C4/23iv; C4/27.v; also eggs at end of July. Feeding of young in nest first noticed 23.v.

Ptilostomus afer Black Magpie

Near Pan Yam several pairs nesting together in Borassus palm fronds. Young seen fed on 20.v.

Lamprocolius chalybaeus Blue-eared Glossy Starling

Birds believed to be of this species seen carrying food to holes in old tree 23.v and 4.vi. Juv. of this species frequently mist-netted early September.

Onychognathus morio Neumann's Chestnet-winged Starling

Hole in rock face, adult sitting 21.v; feeding of young seen 11.v-29.v. Adults very noisy when young present.

Buphagus africanus Yellow-billed Oxpecker

Pair seen building end of July; a neat cup of grass and hair 5 ft. up; C3/15.viii.

Zosterops senegalensis Yellow White-eye

Pair seen building 21.vi; nests are delicate transparent cups usually suspended at end of branch, 1-8 ft. up. C2/13.v; C2/28.v; C2/14.vi; C2/29.vi. Free-flying juv. first seen 16.vi.

Cinnyris cupreus Copper Sunbird

Aug.-Oct. Domed nest of grass and gossamer suspended at extremity of branch, once from nail under verandah eave, 3-8 ft. up. C2/3.ix; C2/15.x; B2/28.viii; B1/27.ix; B2/26.x. Incubation about fifteen days; fledgling period about 11 days. Double-brooded.

Chalcomitra senegalensis Scarlet-breasted Sunbird

April-May; Sept.-Oct. Domed nest (with 'corch') of gossamer and grass at extremity of branch or creeper, once from light flex on verandah, 6-15 ft. up. C2/26.iii; B2/23.iv; B1/13.v; B2/1.x; B2/12.x. One pair known to raise a brood at six month intervals in same nest (R.Kemp, pers. comm.).

Cyanomitra verticalis Olive-backed Sunbird

In Cassa garden, near Barakin Ladi, adult seen carrying food

Serinus mozambicus Yellow-fronted Canary

Nest seen being built, a transparent cup of grass and rootlets, in fork of low bush 3 ft. up, 3.x. (Smith, 1965).

Fringillaria tahapisi Rock Bunting

Nov.-Jan. Neat cup of grass and rootlets on ground at base of rock often near path. C3/6.xii; C3/13.i; B3/20.xi; B2/11.xii; B2/15.xii. Probably double-brooded.

Passer griseus Grey-headed Sparrow

Usually of grass in hole under roof; once in old Lesser Striped Swallow nest. Feeding of young in nest seen during September, Cctober,, February and April.

Gymnoris dentata Bush Sparrow

Untidy grass nests, often in thorny tree, 10-20 ft. up, usually built in November.

Plesiositagra cucullatus Village Weaver

Building throughout wet season as long as suitable building materials available. Colonies of oval domed nests (with no entrance tunnel) of woven grass strips at end of branches. Male builds. Five nests contained eggs (2 or 3) 27.vi. First young seen in nest 17.vii. Free-flying juv. seen in August.

Hyphanturgus brachypterus Swainson's Spectacled Weaver

July-Sept. Solitary, rather shy. Nest of woven grass (with long entrance tunnel hanging below) hanging from palm frond or branch, sometimes over water. Male builds and spends much time at nest attending the young. Building seen in June to mid-August. Young being fed in nest as late as 22.ix.

Anaplectes melanotis Red-winged Anaplectes

One seen building pendant nest beside occupied Black Kites' nest 50 ft. high in kapok tree, 23.i.

Euplectes hordacea Fire-crowned Bishop

Males seen in breeding dress July to October, usually in vicinity of water or swampy ground.

Euplectes orix Little Bishop

Aug. Oct. Males in breeding dress July to November. Of the three <u>Euplectes</u>, this species prefers the drier localities, frequenting open grassland, intersected with ditches in which the nests are usually found. The nest is a neat dome, woven of grass (with entrance high up on side) suspended in grass often over water of ditch or small pool, uo to 3 ft. above water level. Same sites sometimes used annually. Males build but otherwise rarely seen at nest. Eggs (all immaculate blue) found 9.viii-26.ix;

clutch generally three (14 nests), sometimes two (8 nests), occasionally four (3 nests). Twenty-one eggs averaged 17.1 (15.5 - 18.0) x 12.5 (11.9 - 13.0) (Walkinshaw, pers. comm.) Young in nest seen 18.viii-13.x. Probably double brooded.

Euplectes afra Napolean Bishop

Males seen in breeding plumage August to October. Of the three <u>Euplectes</u> this prefers the wetter localities, choosing flooded rice fields and marshes in which to nest. Males seen building 13. viii and 22 ix in marsh vegetation growing in 2-3 ft. of water.

Coliuspasser macrourus Yellow-mantled Whydah

Aug.-Sept. Males in breeding dress July to October. Untidy domed nest of grass built low in grass, not necessarily near water. C2/2, viii; C3/30.viii; C1/19.ix.

Coliuspasser ardens Long-tailed Black Whydah

Display seen at beginning of September at south end of Plateau; this species has never been noticed north of Barakin Ladi.

Spermestes cucullatus Bronze Mannikin

June-Oct. Untidy grass dome in creeper, tree or palm (near bole). C4/27.viii; B3/12.xi. Congregations of young in October.

Ortygospiza atricollis Quail-Finch

Sept.-Nov. Very well-concealed domed nest of grass in tuft of grass on ground. Eggs found 1-25.ix; clutch 3, sometimes four; young in nest found 17.ix-4.xi.

Lagonosticta senegala Senegal Firefinch

May-Oct. Untidy domed nest of grass, lined with feathers, in creeper or hedge, 3-10 ft. up. Building seen 6.v-19.vii. Eggs found 9.v-24.x; clutch three, sometimes four. Young congregate in September.

Estrilda melpoda Orango-cheeked Waxbill

One domed nest of grass on ground, C3/8.x.

Uraeginthus bengalus Red-cheeked Cordon-Bleu

Sept.-Nov. Domed grass nest, lined with feathers, in bush or tree, usually thorny, or creeper; occasionally in trellis or on telephone insulators (once); 2-20 ft. up. Mele builds; many early nests, built in August, come to nothing. Several nests have been found in close proximity to a wasps' nest. Eggs found 12.ix-15.xi. Young in nest seen up to end of November.

Hypochera sp. Combassou sp.

Males in breeding dress seen July - March.

Vidua macroura Pin-tailed Whydah

• . .

Males in breeding plumage seen July to October.

Summary

With the division of the climate on the Plateau into a well-defined wet and dry season, generalisations can be made on the time of year at which certain species breed. It is probable that the seasonal changes associated with the rainfall or lack of it are the initiating stimuli which determine the breeding cycle.

Thus, weavers, doves and other grain-feeder show a peak of breeding activity at the end of the wet season prior to the harvest of the crops; birds of prey (hawks and owls) have their peak during the dry season, and insectivorous passerines and aquatic species breed mainly during the wet season.

References

- Bannerman, D.A. (1953) The Birds of West and Equatorial Africa. Vols. 1 & 2. Edinburgh, Oliver & Boyd.
- Ebbutt, D. (1964) Lanner Falcon attacking Pied Crow. Bull. Niger. Orn. Soc. 1 (2): 12.
- Ebbutt, D. (1965) Red-capped Lark breeding on Jos Plateau. Bull. Niger. Orn. Soc. 2 (5): 23.
- Ebbutt, D., Horwood, M.T., Sharland, R.E., & Smith, V.W. (1964)

 Provisional check-list of the birds of Plateau Province

 over 3,000 feet. Bull. Niger. Orn. Soc. 1 (3): 9-14
- Lang, J.R. (1965) Breeding of Yellow-throated Long-claw Macronyx croceus croceus. Bull. Niger. Orn. Soc. 2 (6): 44-46.
- Lang, J.R. (1966) Egg of Adamawan Turtle-Dove. Bull. Niger. Orn. Soc. 3 (10): 46.
- Lang, J.R. (1966a) Additions Plateau Province. Bull. Niger. Orn. Soc. 3 (10): 43.
- McGregor, D.E. (1950) Notes on the breeding of the Red-breasted Chat Oenanthe heuglini. Ibis 92: 380
- Smith, V.W. (1962) Some birds which breed near Vom, Northern Nigeria. Niger. Field XXVII: 4-34 (photographs)
- Smith, V.W. (1964) Further notes on birds breeding near Vom. Part I & II. Niger Field XXIX: 100-117, 161-174. (Photographs)
- Smith, V.W. (1964a) The Marsh Owl Asio capensis on the Jos Plateau. Bull. Niger. Orn. Soc. $\frac{1}{2}$ (2): 2-3
- Smith, V.W. (1965) A week at Bokkos. Bull. Niger. Orn. Soc. 2 (5): 5
- Smith, V.W. & Killick-Kendrick, R. (1964) Notes on the breeding of the Marsh Owl Asio capensis in Northern Nigeria. Ibis 106: 119-123 (Photographs)
- Smith, V.W., Woods, P.J. & Ebbutt, D. (1966) Breeding notes on the White-crowned Cliff-Chat Thamnolaea coronata in Central Nigeric. Ibis 108: 137-138.

Walkinshaw, L.H. (1966) The West African Crowned Crane on the Joseph Plateau, Northern Nigeria, Bull. Niger. Orn. Soc. 3 (9): 6-10.

AN EXPERIMENT ON OPTIMUM MIST-NETTING HEIGHT

P.J.E.Woods

Introduction

During the northerly (soring) migration of 1966, a 27-day experiment was conducted at Dogon Dutse, Jos, Nigeria to discover what is the optimum height above the ground that mist-nets should be set for maximum capture of passerine Palaearctic migrants. Unfortunately, the whole migration period was not covered by the experiment, but the findings were felt to be of sufficient interest to warrant publication.

Equipment and Location

Initially, only one 20 ft. x 6 ft. (4 shelf) net was erected, with its centre line at a conventional level, approximately 5 ft. above the ground, against a background of low Lantana bushes. Above and behind these were Frangipani trees, and still higher Grevillea and Cachelles. These provided a foliage bank from ground to about 50 ft., covering possible feeding movement levels of most species of migrants. During the previous year the site had been found to be the best in the immediate area.

It was soon apparent that large numbers of migrants were flying above the net, and on one particular evening at least six birds (Garder Werblers Sylvia borin, Wood Warblers Phylloscopus sibilatrix, and Icterine/Melodious Warblers Hippolais icterina/polyglotta) were seen rising from the 'background' to catch high-flying termites. It was patently not possible to cover the whole 50 ft. with nets, but the resulting sense of frustration led the author to devise a system of poles and pulleys which, with two 20 ft. x 6 ft. nets set one above the other*, gave a total net height of about 15 ft. (Figs. 1 and 2).

The nots were, if possible, left open all day, and tended to be in sunshine from about 1100 to 1600 hrs. This did not seem to make them more visible and if anything it was found that the majority of birds

^{*}The author will gladly give details of this system to any-one interested.