

Indian Oology—Notes on the Nidification of some of the commoner birds of the Salt Range, with a few additional from Kashmir, by W. THEOBALD, Junr. Esq.

The present paper is the result of observations made during the years 1852-3, chiefly in the neighbourhood of Pind Dádan Khán and Katás, in the Salt Range, with a few scanty notes made during a flying trip of a month to Kashmir.

The only paper on the same subject I have seen is one by Capt. Tickell, with which in one or two instances my own notes will be found to differ. Layard and Kelaart have also given brief notices on the same subject from which one curious fact may be deduced, viz. that the same birds nest at various times in different parts of the country, a fact by no means surprising when the great extent and varied physical, seasonal and climatic features of our Indian empire are taken into consideration.

At present however, we must content ourselves with the careful exploration of particular districts without attempting to follow out the laws which doubtless regulate these seeming anomalies, which would require much more extensive information than we are at present possessed of.

It is not easy to explain why Oology has not found more favour with those whose taste or opportunities incline them to cultivate some of the minor branches of natural science, for without any undue bias it may at least be reckoned as entertaining and instructive, as many of those "ologies" which are usually considered pleasing, and withal, not unfashionable. Many however, who are ready enough conventionally to tolerate other similar pursuits, can, without being able to assign any particular reason, see in Oology little else than trifling and loss of time, but it requires very little examination to upset such an estimate, for there are few similar studies, if any, that surpass it in interest, few more varied, and none offering a less worked field of enquiry and speculation.

What varied and touching instances of craft and devotion does not the maternal *στροφή* prompt for the concealment and preservation of the callow brood either from natural enemies or from unforeseen perils, and where can we look for more pleasing instances of self-

denial than among birds engaged in tending their eggs or young. This has ever been a favourite and admired subject with poets and lovers of nature, who will not fail to accept in a far wider sense, than originally attached to them, the lines of Flaccus.

“ Non ferox
Hector vel acer Deiphobus graves
Excepit ictus pro pudicis
Conjugibus puerisque primus.”

At no time too, are more conclusive proofs displayed by the brute creation of intellectual power, than by birds engaged in the duties of incubation. It appears indeed little less than absurd and a mere prejudice, to deny this faculty to the inferior animals, for if reason be defined in terms, their actions in a greater or less degree will be found to fulfil those terms with those of man himself, without doubt unmeasurably the highest in every respect of living forms, but between whom and the humbler inhabitants of the earth, that absolute gulph does not exist which his pride—his reasoning pride—has induced him to surmise.

The strong sense of Milton did not fail to see and acknowledge this, for Eve addressing the serpent, says :

“ What may this mean? language of man pronounced
By tongue of brute, and *human sense* expressed?
The first at least of these I thought denied
To beasts, whom God on their creation-day
Created mute to all articulate sound
The latter I demur, for in their looks
Much *reason*, and in their actions, oft appears.”

This passage shewing an acquaintance with and appreciation of the habits of animals, far from common at the time he wrote, affords a pleasing insight into the character of our great poet.

I shall now offer a few remarks as to the means I have found best, after some failures and losses, for preserving the fragile objects under consideration, in the hope they may prove of some service to other collectors.

There are three ways which may be adopted for emptying an egg according to its size and the amount of incubation it has received. All eggs when fresh or only slightly incubated may be blown after

a manner I shall now describe, but some care and careful handling are required to succeed with such eggs as of the English wren or Indian palmswift. The ordinary mode which the young idea usually aspires to inculcate into grandmamma is to make a hole at *both* ends, but the plan I adopt is preferable to the infantile custom, as from requiring a single hole, it does not so much damage or blemish the shell. On deciding on the proper spot which is best in the side, an oval hole must be made varying with the size of the egg, and on holding the hole downwards the contents are easily evacuated by blowing into the egg through a fine pointed blowpipe, the lip of which is just introduced within the shell.

The operation is neat and effectual but a violent blast must not be attempted, as in that case the yolk may cause a momentary obstruction and the egg explode from the pressure of the confined air within. Neither should the hole be made too large, as the air will then find too ready an exit and fail to expel the last portion of the contents. The empty shell should then be immersed in water and filled; by first exhausting the air with the blowpipe, this will effectually clean the interior, and the last remains of moisture may be absorbed on blotting paper. The interior should then be washed with a solution of corrosive sublimate in spirits. A common six penny brass blowpipe answers perfectly for this.

When however, the incubation has lasted a long time, a good plan is to extract the contents by means of a pin bent into a hook. This is a tedious operation which I merely mention in case of any rare egg requiring to be so treated. A third plan answers well for all eggs of a large or medium size, when well incubated. A moderately sized hole must be made in the eggs and the more liquid portion of the contents got rid of. They should then be wiped clean and placed in a shallow pan, when in a few days the maggots of the flesh-fly will consume the contents. They will then only require to be washed; an operation performed with the greatest comfort by one labouring under a severe cold, or glorying in an equally philosophic nose with the ingenuous doctor in "*Humphrey Clinker*." The best mode of packing moderate sized eggs in store is in wooden boxes with saw dust, after closing the holes in the shells with their paper. Tin boxes are not generally to be trusted, at least travelling,

as with such tender charges committed to their care a little smash goes a great way as I have ruefully learned from experience. Small eggs travel well packed in some soft nests as those of "*Lanius*" with a little wool and placed in wooden boxes. Small tin boxes fitted into trays in a wooden box are also very handy but are not readily got well made in this country.

For the nomenclature adopted in the present paper I am indebted to my friend Mr. Blyth, in several cases from the examination of skins of birds shot off the nest, and with a few exceptions, no reasonable doubt attaches to the correct identification of any bird in the present paper; those to which any uncertainty attaches are indicated by an asterisk.

The tabular form I have chosen as most convenient; the LOCAL NAME is ranged under the specific in the second column, the next contains the MONTH and WEEK in which the eggs are laid, the last column the colour of the eggs and a description of the nest.

In the penultimate column, three heads are contained. The number of eggs; usually ascertained from well incubated eggs, to guard against error. The form of the eggs expressed by letters; and the measurement of the long and short axes in inches and decimals of an inch. The following are the commoner forms in the abbreviations used:

O. Oval.	P. Pyriform.	R. Round.
B. O. Blunt oval.	O. P. Ovato Pyriform.	With some mi-
P. O. Pointed ditto.	B. O. P. Blunt ditto ditto.	nor combina-
L. O. Long ditto.	L. O. P. Long ditto ditto.	tions.
R. O. Round ditto.	R. O. P. Round ditto ditto.	

1 Gyps Bengalensis, March 1st, 2nd,	1. O. P.	Dull white. Nest of sticks, and twigs in large trees.
Gid Girij.	$\frac{3.36}{2.62}$	
2 Neophron percnopterus, ... March 3rd,	2. L. O.	Pale brownish red, thickly blotched with dark brownish red.
Safed-doda.	$\frac{2.53}{1.90}$ $\frac{2.75}{1.84}$	Nest, a few twigs placed in holes of cliffs and difficult to approach.
3 Halicetus Gallicus? March 2nd, 4th, April 2nd,	1. B. O. = L. B. O.	Pure white, with sometimes a few spots of brown.
Burra ludi.	$\frac{2.78}{2.13}$ $\frac{2.67}{2.30}$ $\frac{3.18}{2.30}$	Nest of sticks in large tree.
4 Circaetus gallicus, March 2nd,	1. O.	White with a few minute brown specks.
Chota ludi.	$\frac{2.49}{1.90}$	Nest of twigs and sticks in large trees.
5 Poliornis tees-a, April 2nd,	4. O. P. = B. O. P.	Pure grayish or plumbeous white.
Trumti.	$\frac{1.80}{1.50}$ $\frac{1.93}{1.50}$ $\frac{1.93}{1.50}$	Nest small, of twigs, in trees, near cultivation.
6 Buteo canescens, Hodgson, ... March 1st, 4th,	2-3. O. P.	Greenish white, or white, blotched with red or claret brown—vary greatly.
Hil.	$\frac{2.00}{1.66}$ $\frac{2.19}{1.66}$ $\frac{1.66}{1.66}$	Nest large in trees, sticks lined with cotton, rags, &c. and daubed with mud.

- 7 *Lanius lahtora*, March 4th, April 4th, ... 5. O. P.
 Lahtor (generic.)
 1.06
 0.80
- 8 *Lanius erythronotus*, May 1st, 4th, 5-6. B. O. P.
 0.88 0.93
 0.81 0.68
- 9 *Lanius Hardwickii*, May 1st, 4th, June 2nd, 3.4 O. P. = B. O. P.
 0.80 0.87 0.73
 0.64 0.65 0.55
- 10 *Corvus-corax*, January, February, ... 4. O. P.
 1.70
 1.30
- Dom-kak Doda.
- Pale greenish white, blotched and ringed with yellowish gray and neutral markings—vary much in intensity and colour.
 Nest of twigs, lined with cotton or wool, and usually placed in stiff thorny bushes.
- White or pale greenish white slightly ringed and spotted with yellowish gray and neutral.
 Nest of roots, coarse grass, rags, cotton, &c. lined with fine grass and placed in forks of trees.
- Colour same as No. 8, also creamy or yellowish white, spotted with darker.
- Nest compact, in forks of thorny trees; outside fibrous stalks, bound with silk or spider web and covered with lichens or cocoons imitating a weathered structure; inside lined with fine grass and vegetable down.
- Dirty sap green, blotched with blackish brown; also pale green, spotted with greenish brown and neutral.
 Nest of sticks, difficult to get at, placed in well selected trees or holes in cliffs.

- 11 *Corvus splendens*, June 4th, 5. O. P. Clear bluish green, spotted with blackish brown, size and colour variable.
 1.42 1.40 1.56 1.70
 1.05 0.95 1.18 0.97
 Nest, a neat but slight cup of twigs and roots, placed in medium sized trees.
 Kowa.
- 12 *Columba intermedia*, March, April, May, June, July, 2. P. O. = B. O. Pure white.
 1.63 1.43
 1.04 1.17
 Nest none, or only a few twigs in holes, in walls, buildings, cliffs, &c.
 Kabuta.
- 13 *Turtur risorius*, April 3rd, May 1st, September 1st, 2. P. O. = B. O. Pure white.
 1.21
 0.96
 Nest, a few twigs in low trees and bushes.
 Panduk.
- 14 *Turtur Senegalensis*, March, April, May, June, Augt., Sept., ... 2. P. O. = B. O. Pure white.
 1.11 1.20
 0.92 0.90
 Nest, a few twigs in low trees and bushes.
 Ghughu (generic.)
- 15 *Turtur humilis*, April, May, June, Augt., 2. P. O. = B. O. Pure white.
 0.93 1.02
 0.74 0.76
 Nest, a few twigs in low bushes or trees.
- 16 *Pavo cristatus*, June, July, O. P. = B. O. P. Clear brownish cream colour.
 2.66 2.50
 1.88 2.00
 Nest, a mere hole in the ground in difficult stony places in the hills.
 Mor manjur.

- 17 *Perdix Ponteceriana*,April 1st, May, Sept.,... 9. P. = O. P. Clear cream colour.
 A little grass in a hole in the ground, usually sheltered by a bush : or in clumps of grass.
 Jita. $\frac{1.29}{1.03}$
- 18 *Ammoperdix Bonhami*,April, May, June, 12. P. = O. P. Clear cream colour.
 A slight hollow among stones in the hills.
 Susi. $\frac{1.40}{1.00}$
- 19 *Caccabis chakor*,April, May, 12. O. P. = B. O. P. Yellowish white or brownish cream colour, faintly ringed and spotted with tan colour.
 A few leaves on ground under bushes.
 Chakor.
- 20 *Turnix Sykesii*?August 3rd, 5. R. P. Pale gray closely freckled with dirty yellowish ochre, with a few dots of neutral, and blotched with deep reddish brown or blackish umber.
 Nest, a little grass hemp yarn, and a few hairs on ground in field of Bájra.
 Bailer (Taigoor.)
- 21 *Palaornis torquatus*,May 3rd, 4. R. O. P. Pure white.
 Nest none, eggs laid in holes, in walls, trees and steep banks in company with No. 12.
 Totha (generic.) $\frac{1.25}{1.05}$
- 22 *Palaornis cærulocephala*, ...March 3rd, 4.5 B. P. Pure white.
 Eggs laid in holes in trees. $\frac{1.13}{0.95}$ $\frac{1.17}{0.93}$

- 23 *Pycnonotus leucotis*, May, June, July, 4. O. P.*
 Bulbul (generic.)
 White, much dotted with claret red.
 Nest, a neat cup of vegetable fibres
 in bushes.
 $\frac{0.91}{0.64}$
- 24 *Pycnonotus Bengalensis*, ... May, June, July, 4. B. O. P.
 Deep pink, blotched with deep claret
 red.
 Nest similar to No. 23.
 $\frac{0.87}{0.62}$
- 25 *Acridotheres tristis*, June, 5. O. P.
 Pale bluish green.
 Nest roots and other rubbish, in
 trees or holes in house, Varan-
 das, &c.
 Clear greenish blue.
 Nest, a hole in the sand at the end
 of a gallery run into a steep bank,
 many nests in company.
 $\frac{1.20}{0.85}$
- 26 *Acridotheres gingianus*, May 3rd, 7.8 O. P.
 Gang-maina.
 $\frac{1.08}{0.81}$
- 27 *Cypselus affinis*, April, May, June, Augt.,
 Ababil (generic.)
 Sept., O. P.
 Pure white.
 Nest, light straw and feathers
 strongly agglutinated to rafters
 of houses, nests in colonies and
 often united together, size varies
 much, some have long necks
 others are mere saucers without
 any. Second nests are less care-
 fully built. The inside is not
 lined, and feels like coarse card-
 board.
 $\frac{0.90}{0.56}$

- 28 *Hirundo Sinensis*,February 3rd,..... 4. O. P. Pure white.
Nest of grass lined with feathers,
placed at the end of a gallery in
a steep river bank.
0.62
0.48
- 29 *Oriolus kundoo*,May 2nd,..... 4. O. P. Pure white with a few black spots.
Nest a neat cup of woven grass,
attached by the side to a bough
of some fruit tree.
1.17 1.23
0.81 0.75
- 30 *Dicrurus macrocercus*,May, June,..... 4. O. P. Dirty reddish white spotted with
red; colours vary; in some the
spots seem to have run, as ink
does on damp paper.
1.08
0.73
Nest a neat shallow cup of roots
and stalks in bushes.
- 31 *Passer domesticus*,.....February, March, April,
May, June, July, ... 5-6. O. P. White spotted and blotched with
brownish black or brownish
white blotched with deep brown;
colour varies much.
0.85 0.82
0.65 0.61
Nest a loose structure of grass and
feathers, in trees or houses.
- 32 *Malacocercus caudatus*,.....March, April, May,
June, August,.....4.5 O. P. L. O. P. Clear greenish blue.
Nest a loose but deep cup of grass
and twigs in bushes in jungle or
garden. The first size is com-
mon, the second and third mea-
surements were from eggs of one
nest.
0.84 1.04 0.75
0.66 0.60 0.55
- Sór.

- 33 *Oxylophus melanoleucus*, ...August, 1. B. O. Deep greenish blue.
(Identified by Mr. Blyth.) $\frac{0.91}{0.81}$
This evidently parasitical egg was taken from the nest of No. 32, containing four ordinary eggs which it closely resembles in colour, though its form indicates its parasitical character.
- 34 *Galerida cristata*,March 4th, May 3rd,... 4. O. P. Yellowish white uniformly freckled, with grayish yellow and neutral.
Chandul. $\frac{0.88}{0.66}$ $\frac{0.82}{0.64}$
Nest, a little grass in a hole in the ground.
- 35 *Thamnolia Cambaicusis*,April 2nd, 4. P. O. P... Greenish white ringed and spotted with pale reddish and a little neutral.
Jimma (generic.) $\frac{0.79}{0.60}$
Nest, loose grass and bits of snake's skin in holes in the sides of Nullas.
- 36 *Nectarina asiatica*,May 4th,..... O. P. Grayish white freckled and ringed with cineritious gray.
 $\frac{0.66}{0.47}$
Nest, a neat purse of vegetable fibre and down suspended from some small bough and masked in front by a few dead leaves loosely attached by silk threads.

37 Munia Malabarica,	May, August, Septem-12. 13. = (25.)	Pure white.
	ber, October, Decem-O. P. 0.59	Two pairs of birds frequently if not usually are employed in the construction of one nest in which the two hens consecutively lay—so the same nest has sometimes 25 eggs in it, in different stages of incubation—nest often clumsy
	0.64 0.60	
	<u>0.44</u> 0.50	

and hastily made—but usually a neat domed structure of fine grass with one opening, sometimes prolonged into a short deflected neck partially closed by the elasticity of the long spikes of grass forming it; sometimes the nest is a simple platform of grass, open at each end, but the grass ends curved over to meet at the top, usually placed in thorny bushes, often very conspicuously and close to roads. It is much to be doubted if the eggs found occasionally in October and December, are hatched.

1 Podiceps Philippensis,	August, September, ...	5. P. O. L. P. O.	Pure white; when recently laid, green is soon soiled brown in the nest.
		1.50 1.42	
		<u>1.04</u> 1.00	

Pandubi.

Nest, a few weeds heaped on the rank vegetation of jheels, but floating, and usually several nests together.

2 Gallinula chloropus,	August 4th,	O. P.	Pinkish cream or gray spotted and slightly ringed with deep red [nest. brown.
		1.62	
		<u>1.15</u>	

Nest as No. 1: eggs also stained by creamy yellow or stone colour, thickly spotted and blotched with blackish brown.

3 Sarciophorus lilobus,	May 2nd,	3. P. = O. P.	
		1.63	
		<u>1.19</u>	

Jithiri.

4 Ardeola leucoptera,June 4th,	5. 6. P. O.	Pale green.
Bogla (generic).	1.54	Nest of loose sticks in trees.
	<u>1.16</u>	

Kashmir Notes.

1 Tinunculus alaudanus,April 3rd,	6. B. O. P.	Pale reddish brown freckled and blotched with brownish red.
Shikra.	1.68 1.51	Nest, hole in sarai wall of Thánna S. of Bāranegala Sháhabad and valley generally.
	<u>1.22 1.27</u>	
2 Milvus? Buteo,April 4th,	2. O. P.	Nest and eggs as in plains. (No. 6 ante.)
	2.10 2.40	
	<u>1.80 1.77</u>	
3 Corvus,April 3rd,	4. O. P.	Green, spotted with brown, valley generally.
Small black Hill Crow.	1.70 1.60	Nest placed in "chinar" and difficult trees.
	<u>1.20 1.25</u>	
4 Corvus monedula,May 1st,	4. 5. 6. O. P. L. O. P.	Pale clear bluish green: dotted and spotted with brownish black.
	1.26 1.45 1.60	Valley generally. In holes of rocks, beneath roofs, and in tall trees.
	<u>0.99 1.00 1.00</u>	
5 Sturnus vulgaris,May 2nd, 3rd,	O. P.	Pale clear bluish green.
Jilgiri.	1.15	Valley generally; in holes of bridges, tall trees, &c. in company with No. 4.
	<u>0.85</u>	

- 6 *Acridotheres tristis*,April 3rd,Nest and eggs as in plains. Rajauri and lower hills generally.
- 7 *Caccabis chukor*,May 3rd,Nasmana on the Chandra-baga: eggs as ante, No. 19.
- 8 *Pycnonotus leucotis*,April 4th, at Bhimba,Nest and eggs as in plains; ante May 2nd at Islamabad. No. 23.
- 9 *Hirundo rustica*,*May 2nd,4. L. O. P.Pure white spotted with bright reddish brown. Valley generally.

$$\frac{0.83}{0.53}$$
Nest under eaves, outside coarse straw cemented with mud, inside fine straw lined with feathers.
- 10 *Budytio citreola*,May 3rd,4. O. P.Pale gray thickly dotted and ringed with grayish brown and grayish neutral mingled together.

$$\frac{0.95}{0.70}$$
A depression in soft earth beneath a rock near Baragari. Valley generally.
- 1 *Anas Boschas*,May 1st,L. O. P.Dirty white with a tinge of yellowish green near Supeia valley of Cashmir.

$$\frac{2.27}{1.55}$$
- 2 **Podiceps cristatus*?May 2nd,5. P. O.Pure white; when recently laid pale green. Wala lake.

$$\frac{2.35}{1.51}$$
Nest, a heap of weeds floating on the surface of the water, but connected to reeds, &c.

3 Podiceps Philippensis,May 2nd,		5. P. O.	Pure white. Wala lake. Nest as No. 2.
		1.40	
		<u>1.00</u>	
4 Fulica atra,May 2nd,		8. L. O. P.	Pale brownish gray, dotted with reddish black. Wala lake. Nest, pieces of dried reeds about 6 inches long, piled together among reeds and floating on the water.
		2.10	
		<u>1.40</u>	
5 Gallinula chloropus,May 2nd,		O. P.	Pale gray or reddish gray dotted and spotted with deep reddish brown. Nest, a few weeds heaped on the water among reeds.
		1.70 1.57	
		<u>1.26 1.11</u>	



Theobald, W. 1855. "Indian Oology—Notes on the Nidification of Some of the Commoner Birds of the Salt Range, with a Few Additional from Kashmir." *The journal of the Asiatic Society of Bengal* 23(VI), 589–603.

View This Item Online: <https://www.biodiversitylibrary.org/item/124458>

Permalink: <https://www.biodiversitylibrary.org/partpdf/367460>

Holding Institution

Natural History Museum Library, London

Sponsored by

Natural History Museum Library, London

Copyright & Reuse

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.