

HERPS & MAMMS OF

MCKEAN CHECKED

UP TO STC II.

McKean

Mammals

SIC 3 -

Oct 24-28, 1963 - (none reported) (all members included)

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SIC 4

Feb 16-20, 1964 (Sibly) - none reported (all members included & checked)

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SIC 5

July 18-20, 1964 - nothing reported (all members included & checked.)

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SIC 6

Oct 18-22, 1964 (Sibly) - none reported (all members included & checked)

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SIC 7 (Feb 6-8, 1965) all members checked, nothing reported.

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SIC 9

Sept 21-23, 1965 (all members checked, nothing recorded.)

McKean

Herps

SIC 3

Oct 24-28, 1964 (Sibley) - one turtle turned over by  
Larry (Huber) (about 300 pounds)

" " (Huber) found sea turtle on the  
beach to take blood sample from.

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SIC 4

(all members checked.)

~~Oct~~ Feb 16-20, 1964 (Sibley) geckos very common.

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SIC 5

July 18-20, 1964 - nothing reported  
(all members included & checked)

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SIC 6

Oct 18-22, 1964 (Sibley) two geckos collected  
(all members checked)

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SIC 7

(Feb 6-8, 1965) (Huber) 200 pound turtle seen  
digging during the night.  
(all other members checked, nothing  
reported.)

SIC 9

Sept 21, 23, 1965

King - "many turtle holes along beach.  
" several <sup>pants</sup> pockets are filled  
with geckos

Kepler - many fresh turtle  
scrapings sighted  
(other members checked, nothing  
else recorded.)

Pleas never  
free copies



ORNITHOLOGY OF THE VITI\*, SAMOA AND TONGA ISLANDS

by Finsch and Hartlaub

Bristle-thighed Curlew

Peale found *N. femoralis* in large numbers on Vincennes Island of the Paumotu group. Through Dr. Gräffe we obtained it from McKean's Island of the Phoenix group, with the comment: "rare; feeds on crabs along the beach."

*Sterna panaya* = (*Sterna anaethetus*?)

In the Calcutta Museum from the Bay of Bengal and from Singapore. Individuals from the coast of the Sunda Islands (Java, Borneo, Sumatra) and from the Moluccas (Obi Islands) in the Leiden Museum. According to Gould, frequently in the Torres Strait and on the coast of New Holland, particularly on the West Coast. It also occurs in the Philippines. Sent in by Dr. Gräffe from the Vitis and McKean's Island, Phoenix group. According to Bloxham, on the Sandwich Islands.

Since our museum, thanks to Mr. Johann Ces. Godeffroy received three of the eggs of this type sent by Dr. Gräffe from McKean's Island, we consider it necessary to describe them in greater detail, particularly since they differ substantially in form and markings. In general they resemble very closely the eggs of *St. fuliginosa* and *stolidus*, and they show the same grain.

Gray-backed Tern

Peale found them on the Vincennes Island of the Paumotu group, Dr. Gräffe on McKean's Island in the Phoenix group. In the Leiden Museum there are individuals from the Indian Ocean and from Halmahera, the Eastern Moluccas.

Fairy Tern

According to Gould it is common along the southeastern coast of Australia, from Moreton Bay to Cape York. Forster cites it from the

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\* Fiji

Friendly Islands (Eaue and Gongatabu) and the Society Islands (Waihoo, Waitahoo, Otaheiti and Huaheine). It is represented in the Paris Museum from the Marquesas, thanks to Filleux. According to Peale it also occurs on all coral islands in the South Seas. Dr. Pickering names Sydney Island and Gardner's Island as localities where this species was observed. Darwin observed it on Keeling Island. Latham cites Christmas Island. According to Cuming it breeds on Norfolk Island. Von Kittlitz identified it on several of the islands in the Caroline Islands.

Dr. Gräffe, who observed *G. alba* on McKean's Island in the Phoenix group, reports the following: "breeds in October and November. Lays a greenish brown, marbled, roundish egg, out in the open on rocks or boulders."

#### Common Noddy

*A. stolidus* is very gregarious, even during the incubation period, which seems to take place at quite different times of the year, depending on the locality. In the southern states and Cuba this occurs in May and June, on the Somali Coast as well. But Darwin found this species nesting on St. Paul in February, Gilbert observed this on the Australian coast in November and December, and Pickering on Gardner's Island in February. On the Mordlock Islands the Senjavin naturalists observed large nesting colonies, and according to Swinhoe these also occur on the coast of Formosa. *A. stolidus* also nests on most of the Polynesian Islands.

#### Hawaiian Noddy

The range of this *Anous* seems to extend exclusively over the eastern seas. It is known from the north coast of Australia (Gould), Norfolk and Nepean Island (Gray), Viti Islands and Uëa, the Wallis Islands (Gräffe) and Paumotu group, Raraka. Here Peale found them nesting in large numbers on Enderby Island in January. According to Gould *A. leucocapillus* is identical to *A. stolidus* in daily and nesting habits.

#### Blue-gray Noddy

Neboux does not give a special locality, but names the Pacific Ocean as the bird's range. Gould obtained this species from Christmas Island, Peale from Hondean Island of the Paumotu group. Here he found this tern nesting in the month of August. The eggs lay in small depressions of the coral reef near the beach without any sign of a nest. Three eggs per cavity were found. The bird may also lay four. The color of the egg is pale, milky white with irregular sepia brown spots. Dr. Gräffe sent in this species from McKean's Island with the following comment: "lives in pairs in rocky areas of the island and lays a white, brownish-black spotted egg in October and November."

These observations thus do not exactly coincide with those made by Peale.

These eggs, two of which were sent to us by Dr. Gräffe from McKean's Island, seem first to be very large in comparison with the size of the

bird and differ greatly in coloration from all tern eggs known to us, but they possess the same fine grain, showing only under the magnifying glass fine pores and have a rather smooth feel.

Audubon's Shearwater

*P. nugax* has been observed up to the present in the following localities: on the east coast of Australia, in the northeastern part of New Zealand, on the island of Norfolk (Gould), Lord Howes Island (Gray), Christmas Island (Gray) and by Gräffe on Viti and McKean's Island (Phoenix group). McGillivray found in July 1854 nesting areas of this species on Royal Island. The two eggs are snow-white.

The egg sent in by Dr. Gräffe is not snow-white but has a slightly yellowish tint and is somewhat shiny on the surface. Due to the fine, shallow but clearly visible pores it does not feel completely smooth. In form it is rather similar to the eggs of *Puffinus cinereus* and major but is less pointed, rather long, the two halves are almost identical, whereby the pointed end contrasts very little. Length 1"10". Width 1"3".

Audubon's Shearwater

McKean's Island (Phoenix group), collected by Godeffroy. The entire top, along with the lores, narrow under the eye and the posterior cheek region dark smoky brown and black, the base of the feathers white; sides of the head and entire underside, along with under wing linings and axillaries white; only the smallest wing liners on the underside of the fore edge -- brown. The feathers of the sides of throat and breasts are sooty brown with white tips. The feathers of the tarsus and undertail-coverts sooty brown, with fine white tips; the lateral undertail-coverts whitish on inside vane. The secondaries and primaries are a lighter brown on the inner vane than on the outer, changing toward the base to pale white, grayish on the underside. The bill is black; legs and toes blackish gray, inner side of the legs brownish; webs light, pale brownish. In life, iris, feet and bill black (!!) (Gräffe). Nestlings from the same locality were covered by long, soft down, dusky, gray-brown on the upper parts and white on the under parts. Bill blackish-brown. Length circa 11". Wings 6"10". Secondaries 2"9". Primaries 2". Vanes 11". Bill height at base 4". Length 16". M. Z. 15".

This typical *Puffinus* is most similar in size and overall color distribution to *P. nugax*. Sol. (*assimilis*. Gould) and *P. obscurus*. Gml. It differs from *P. nugax* in its sooty brown undertail coverts and in the fact that the sooty black of the head also covers the lores, the under-eye region and the cheek area. These parts are white in the *nugas*. *P. dichrous* is therefore even more similar to *P. obscurus*, differing however from the latter due to the whitish inner vane of the lateral undertail-coverts. In this respect *P. dichrous* is to *obscurus* as *P. anglorum* is to *yelkuan*. Since we with Schlegel consider the difference in coloration of the undertail coverts important enough for species differentiation for the *Puffinus* species, we must consider this a new species. But if later studies indicate that



this characteristic is without specific value, *P. dichrous* could perhaps be assigned to *obscurus*. Up to the present we have seen only one example among those sent by Dr. Gräffe. This came from McKean's Island, Phoenix group. The species breeds here and lays a white, oblong, oval egg under holes in rocks (Gräffe).

Wedge-tailed Shearwater

One individual from McKean's Island (Gräffe) perfectly matched Gould's description. The bird skin was as follows: bill horny blackish, feet light brownish, toes and webs light fawn-colored.

Gould discovered this species on the west coast of Australia where it nested on many of the sandy islands, on West Wallaby Island by name. McGillivray also found it on Lord Howe's Island, and Dr. Gräffe sent in an individual from McKean's Island (Phoenix group). Its range has thus become quite extensive.

Red-tailed Tropicbird

*Ph. phoenicurus* breeds on most of these South Sea islands, as on the Mascarenes (Rodriguez) and the islands in the southern half of the Red Sea (according to Rüppell). Peale found it nesting in August in large numbers on Houden and Sydney Islands in the Paumotu group, Krefft in July on the Brampton Shoals to the east of Australia, Junge and McGillivray on Raines Island in the Torres Strait. Eggs -- according to the latter scientist there are two eggs, while according to Peale there is usually only one. The egg is laid in niches in the coral or under clumps of grass.

The long red tail feathers were formerly highly prized by the South Sea islanders, particularly the Tahitians, as ornamentation. They were also greatly sought after on the Sandwich Islands (Bloch).

*Phaethon aethereus* = White-tailed Tropicbird? or RTTB

The following localities have been definitely determined for this species: West Indies, Bermuda (Wedderburn et Hurd), Tobago (Kirk), Martinique (Taylor), the coast of Peru (Tschud), Atlantic Ocean, the Island of Ascension (Acland), the Azores (Bolle); the west coast of Africa (Hartl), the Somali coast (von Heuglin); in Polynesia; New Caledonia (Gray), McKean's Island, Phoenix group, Viti and Samoa islands (Gräffe), the Friendly Islands (Gray), Society Islands (Gray), Paumotu group (Peale), Carolines (Gray), Palmerston and Christmas Island (Gray).

Blue-faced Booby

Young bird: (McKean's Island) almost as the preceding, but many brown feathers on the back, and the rump thus appears an almost uniform brown; the upper tail-coverts are white with brown tip edges.

Young bird (Texas?) Bremen Museum: the entire upper parts are almost uniform brown, only on the shoulders, back and rump many white feathers appear, most of which however show a washed out brown spot in the middle. Many of the wing coverts have white tips; also the brown feathers of the front part of the throat; the rest of the under parts, along with the wing linings pure white.

Atlantic Ocean (Sundev.), Ascension Island (Lesson), Red Sea (von Heuglin), Cocos Islands and Sunda Strait (Leiden Museum), Torres Strait and north Australia (Gould), Paumotu group, Honden Island (Peale), Phoenix group, McKean Island (Gräffe). Dr. Pickering observed this species on the last-named island also, as well as on Gardner and Wake Island and in the vicinity of the Sandwich Islands, below 167°30' west longitude. It therefore seems not improbable that this species reaches as far as the coast of the Americas. The "Texas" on the tag of our individual is therefore undoubtedly correct, although we cannot state this with absolute assurance. The *Sula dactylatra* is a similar story. Bryant assigns this bird to the Bahama Islands, at least including our species. Without comparing the specimens we cannot say whether *Disporus cyanops* from the Berlin Museum from Peru is genuine.

Peale found this species breeding in August on Honden Island and in January on Enderby Island. Thus breeding is not limited to a specific season, as with the related species. The birds had not made a real nest, but the single egg lay on the bare sand or earth. In one nest two eggs were found. According to Gould this species nests in large numbers as well on Raines Island on the north coast of Australia and lays only one egg. This latter is a dirty white, shot with reddish brown. As Peale indicates, it receives this latter color through external influences. Bryant gives *S. dactylatra* as breeding from Santo Domingo Rock (Bahamas), but gives the number of eggs as two.

#### Brown Booby

In the Pacific Ocean we know of the following localities up to the present time: Society Island, Huaheine, Oriadea (Forst.), Marquesas Islands (Jardine), Paumotu group, Honden Island, Enderby Island, Gardner Island (Peale) and the Phoenix group, McKean Island (Peale, Gräffe). Gray also indicates the Friendly Islands as an area. Gray also mentions this species among the birds of New Zealand; it would thus extend at least southward past the Tropic of Capricorn.

*D. piscator* is identical to *D. sula* in habits. As the latter it is a very gregarious bird, which dives very skillfully and feeds on fish and crustaceans. In August Peale found hundreds of pairs nesting on Honden Island (Paumotu group). The rather loosely built nests were placed in and on bushes and some of them still contained eggs. The picture was the same on Enderby Island in January. Some nests already contained well developed young, while freshly laid eggs were found in others. Mostly there was only one egg or one young. McGillivray also gives one egg as the usual number. It is white in color. McGillivray found in May on Raine Island off the north coast of Australia only one egg; the nesting seemed to be over. Salvin investigated the nesting places of this booby in May on the coast of Honduras. Nesting activities thus do not seem to be limited to a specific season. A detailed report on this is given by Peale, McGillivray and Salvin (*Ibis* 1864, page 379).

## Red-footed Booby

We have collected the following remarks on the distribution of this species: Australia and Polynesia: north and northeast coast of Australia (McGillivray) Torres Strait (Gould), New Caledonia (Forster, Verreaux), Tonga Islands, Lord Howes Island, Society Islands, Huaheine, Oriadea (Forster), Enderby Island (Gray), Bonin group (Kittlitz), Viti Islands, Samoa Islands, McKean Island, Phoenix group (Gräffe), Kingsmill group, Gilbert Island, Paumotu group, Aurora Island (Peale), Marquesas, Palmerston and Christmas Island (latter indications according to Gray).

*D. sula* breeds on most of the coral islands of the Pacific (according to Peale), as well as in the areas of central Polynesia to be discussed by us, for Dr. Gräffe sent eggs from McKean Island.

The egg, collected by Dr. Gräffe on McKean Island, is oblong, asymmetrical, clearly pointed at the narrow end and of a light greenish-bluish color. This latter color is first in evidence when one removes the dull, yellowish-white covering with a knife. This chalky covering does not cover the egg evenly, but is so thin in places that a bluish coloration shows through. In other places it seems particularly thick and forms marked protuberances containing marks which at least in a fresh state occurred during laying. Also under external influences the egg has a rusty yellow coloration toward the end. Length 2"1", width 1"6". *D. sula* may also breed along the African coast; the Leiden Museum possesses a specimen collected in August on the Gold Coast.

### Frigate-bird

Cassin's attempt to divide the great Frigate Bird into two species, an Atlantic (*T. aquilus*) and a Pacific (*T. palmerstoni*) has proven to be quite untenable, since the characteristics which Cassin gives for the *palmerstoni*, such as "larger throat sack, narrower primaries and tail feathers, longer tail and smaller size," are far from constant and must be ascribed to chance deviations. Between skins from McKean Island and Brasil we have not found the slightest support for a species differentiation. It is also unjustified for Cassin to assign the smaller birds to *T. palmerstoni* Gml., since Latham indicates a larger size for these than for *aquilus*.

The coast of the southernmost of the United States, Texas, Florida (Baird), Gulf of Mexico (Audub.), West Indies: Cuba (Gundlach), Jamaica (Gosse), Antigua and St. Croix (Newton), Bahamas (Bryant), Bermuda (Wedderburn); the coast of Guiana (Schomburgk) and Brasil (Prince Max, Burm.); the west coast of the Americas: California (Baird), Venezuela (Sclat.), Honduras (Salvin), Peru (Tschudi) and the Galapagos (Darwin); in the Atlantic: Ascension Island (Lesson. Sclat.), Cape Verdes Islands (Bolle); the west coast of Africa (Morgan), Congo (Turkey); Madagascar and Mauritius (Goudot), Rodriguez (Newton); in the Indian Ocean: Ceylon (Kelaart), Cocos Islands, Malabar coast and the Bay of Bengal (Jerdon), Sumatra (Raffles); the Moluccas Halmahera (Leiden Museum), Batjan (Leiden Museum); in the

Pacific: the north and east coast of Australia (Gould), Brampton Shoals (Leiden Museum), New Caledonia (Forst.), Samoa Islands (Rosa Island, Peale), Phoenix group, McKean Island (Gräffe), Society (Tahiti Forst., Huaheine Sclat.) and Marquesas Islands (Forst.), Paumotu group (Honden, Bow and Ducis Islands, Peale), Palmerston Island (Latham), coral reef to the north of the Sandwich Islands (Kittlitz) and Sandwich Islands (Gray).