

Galaxy

SCIENCE FICTION

ALL ORIGINAL STORIES • NO REPRINTS!

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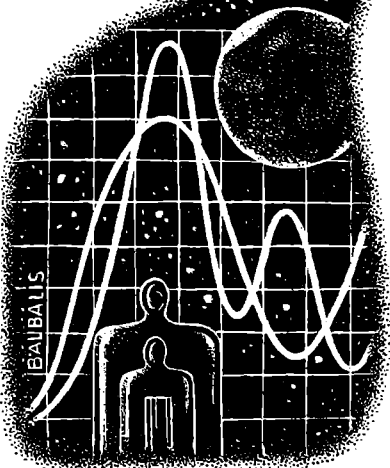


**for
your
information**

BY WILLY LEY

**ON WITH THE
DODO HUNT!**

ABOUT 130 miles of open sea separate the two islands of Mauritius and Réunion. This is not a long distance for birds with a reasonable power of flight and it is only logical that many birds are common to both islands and even to Madagascar. For a flightless bird, however, 130 miles of open sea might



as well be 3,000 miles — it could no more cross the one than the other. Hence it is obvious that the Mauritius dodo, of which Peter Mundy said specifically that it “can neither flye nor swimm,” could not cross over to Réunion. Nor could a flightless bird of Réunion cross over to Mauritius.

Logically, then, if there also was a dodo on Réunion, it could not be expected to be the same as the dodo of Mauritius. Similar, yes, but only that. Their ancestors, presumably still capable of flight when they somehow got to the Mascarene islands, were no doubt the same. But even a short separation, as geologists speak of time, would produce very noticeable differences.

Well, there was a dodo on Réunion and it *did* differ from the Mauritius dodo, but for more than a hundred years, naturalists did their best to overlook this difference. Yet the very first witness pointed it out. He was an Englishman by the name of J. Tatton who, in 1625, published an account of a voyage made a dozen years earlier under Captain Castleton.

Reporting on Réunion, he wrote: “There is a store of Landfowl, both small and great, plentie of Doves, great Parrats, and such like; and a great fowl of the bigness of a Turkie, very fat, and

so short-winged that they cannot flie, being white, and in a manner tame; and so are all other fowles, as having not been troubled or feared with shot.”

The only other witness who saw the Réunion dodo on the island and wrote about it was the Dutch traveler Willem Ijsbrantzoon Bontekoe van Hoorn. He spent three weeks there in 1619, and not only described what is unmistakably a dodo, but even referred to it as a *Dad-eersen*. Unfortunately, he did not say anything about its color.

LATER researchers, though, kept coming across pictures which did not jibe with the other dodo pictures. Not only was the plumage white with yellow wing feathers, but they were different in other respects, too. The feet were more slender, the tail was different and so was the bill.

Now it is true that there are sketches of the Mauritius dodo in which the bill looks different, the reason being that the moulting dodo also shed the sheath of the bill. But these white dodos seemed to have their sheath in place. The pictures are all by just two artists, Pieter Holsteyn (around 1640) and Pieter Withoos (around 1685). Since it is most unlikely that a full-grown specimen would live for forty-five years in captivity, this indicates

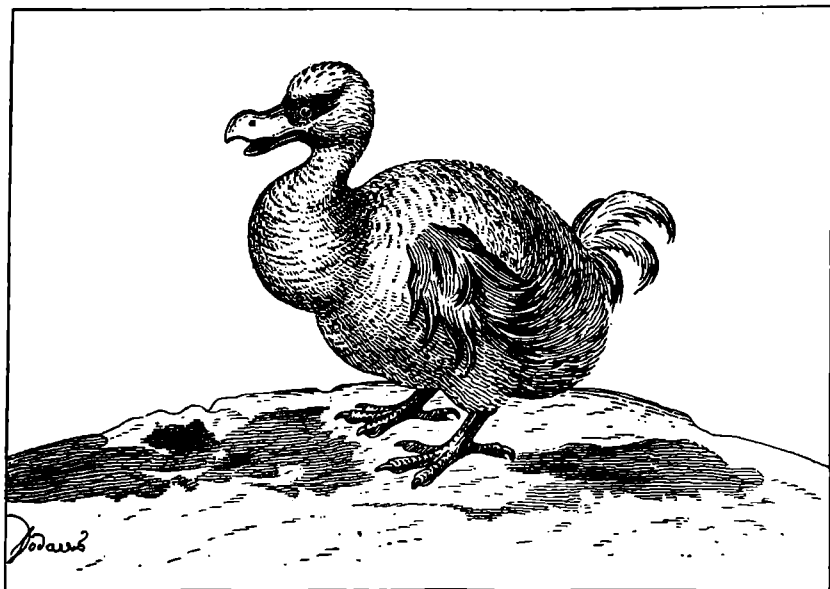


Fig. 1: Sketch of the White Dodo of Réunion, by Pieter Holsteyn, early seventeenth century

that two specimens of the white dodo reached Europe.

The older naturalists failed to draw a clear distinction and even H. E. Strickland, in his monumental work on the dodo (1848), did not do so.

The white dodo was introduced to science as a distinct species as late as 1907, when the Hon. W. Rothschild published his work *Extinct Birds*. (It had the subtitle: "An attempt to unite in one Volume a short Account of those Birds which have become extinct in historical Times, etc.," but the short account turned out to be in folio with no less than 45 color

plates.) The scientific name proposed for it was *Didus borbonicus*. In 1937, Dr. Hachisuka changed the scientific name (for various reasons that do not interest us here) to *Victoriornis imperialis*.

Probably because Réunion is more mountainous than Mauritius, the white dodo lived longer than the gray dodo. There is a report that Mahé de la Bourdonnais, when he was governor of both islands, sent one to France. There is no record from the other end — we don't know whether it got to France or not — but Mahé de la Bourdonnais

was governor from 1735-1746, long after the Mauritius dodo was extinct.

The Réunion dodo fails to be present for the first time in a survey made in 1801. It must have succumbed to dogs, rats and pigs during the latter half of the eighteenth century. That there was still something else to be said about Réunion was not even suspected until recently. But this additional mystery can best be explained with a detour to the third of the Mascarene islands, Rodriguez.

As has been told in the preceding issue, the island was first reached by the Portuguese Diogo Fernandes Pereira in 1507. It took almost two centuries until settlers got there, and even these went to Rodriguez only as a second choice.

They were French Huguenots who were supposed to go to Réunion from Holland. It was a small group of only eleven men. Their chosen leader was a man a few years past fifty at the time whose name was François Leguat. His younger brother was also in the group.

THE Dutch ship, with the French Protestants aboard, left Holland on September 4, 1690, and arrived at Réunion on April 3 of the following year. What happened then is not quite

clear, but it seems that it had been believed in Holland that the French had abandoned the island. When the ship's captain realized that they had not, he did not land but set course for Rodriguez, where the French stayed for about two years. Then they built a boat and sailed for Mauritius.

A weird and senseless odyssey was the result of this act. About half a year after they had landed, they were discovered by the governor who, after a few months of deliberation, banished them to a small rocky island offshore. There they were kept prisoners for three years and then shipped, still as prisoners, to Batavia. A year later, they were released and sent back to Holland as free men, where they arrived in June, 1698.

François Leguat did not stay long, but went to England, where he rewrote the journal he had kept all along for publication. In 1708, both Leguat's French original and an English translation appeared.

Other voyagers had said before Leguat that there were "dodos" on Rodriguez, but Leguat was the first man who had lived there for any length of time. Moreover, Leguat could draw. He provided illustrations for his book and there can be little doubt that he had made the sketches on the spot, because some of them are



Fig. 2: The Solitaire of Rodriguez, as pictured in François Leguat's book of 1708. Drawing probably by Leguat himself

rather complicated maps and plans.

"Of all the Birds in the Island," the English edition read, "the most remarkable is that which goes by the name of *Solitary*, tho' there are abundance of them. The Feathers of the Males are of a brown grey Colour: the Feet and Beak are like a Turkey's, but a little more crooked. They have scarce any Tail, but their Hind-part covered with Feathers is roundish, like the Crupper of a

Horse; they are taller than Turkeys . . . The Bone of their Wing grows greater towards the Extremity, and forms a little round Mass under the Feathers, as big as a Musket Ball. That and its Beak are the chief Defence of this Bird. 'Tis very hard to catch it in the Woods, but easie in open Places, because we run faster than they . . . Some of the Males weigh forty-five Pounds."

LEGUAT reported that the males were brown in color, the females either brown "or fair, the colour of blonde hair"; most likely the brown ones were older females. He also mentioned that the females had a "head-band, like the head-band of Widows, high upon their Beak," and that lighter feathers on their chest formed an outline like the bosom of a woman. Leguat's drawing, therefore, is that of a female, since the males lacked these characteristics.

There is no other drawing of a solitary besides Leguat's. However, just as in the case of the Mauritian dodo, remains of the solitary have been excavated on Rodriguez, so that a few nearly complete skeletons could be constructed.

Again the story has a few wrinkles which were added later.

In 1761, one of the famous transits of the planet Venus

across the face of the Sun was due to take place and Rodriguez happened to be in such a geographical position that a fine observation of the transit could be made from there. The man to go to Rodriguez for this purpose was Abbé Pingré. In addition to doing the astronomical job for which he had taken the trip, Abbé Pingré reported that the solitaries were still around. He is the last man to have seen them.

Some five years later, Pingré's colleague and compatriot Le Monnier decided that the expedition should be honored in some manner. He had discovered a number of small stars in the space between the constellations Libra, Scorpio and Draco which could be put together into a new constellation. He was going to call it *Solitarius* to honor Pingré, Rodriguez and the transit of Venus expedition.

But he needed a picture of the solitary, and since his compatriot Brisson had recently published an enormous book on birds, he felt sure that it would be in there. Looking through the entries, he found a *solitaire* listed and copied the picture onto his star map. I don't know whether Le Monnier ever learned that the picture he used was that of *Turdus solitarius*, the solitary thrush!

The other wrinkle is tied up



Fig. 3: The gable stone of Veere on Walcheren, discovered by Prof. Oudemans

with the name of Geoffroy Atkinson, a professor of Romance literature who has written several books with titles like "The Extraordinary Voyage in French Literature before 1700," "The Extraordinary Voyage in French Literature, 1700 to 1720" and so forth. Personally, I failed to be enchanted by them; they are solid work, but I had the impression that Atkinson knew literature and nothing else.

Now I learn from Hachisuka that Atkinson, in 1921, went overboard with his interest in extraordinary voyages and declared that Leguat never traveled! He could "trace" every item in Le-



Fig. 4: The so-called Dodo of Florence. Note resemblance to the Dutch gable stone

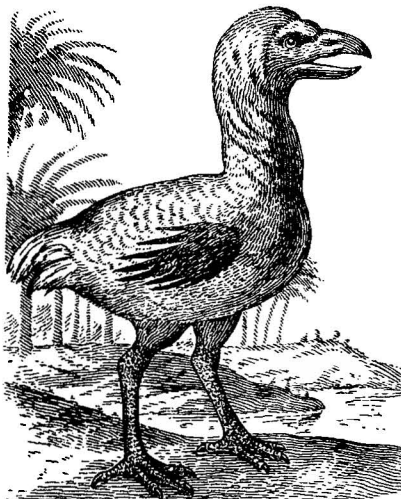


Fig. 5: Female Réunion solitaire, picture discovered by Dr. S. Killermann

guat's journal to its "sources." The account of the Cape of Good Hope came from this book, the sea turtles from that book, the story of his imprisonment from still another book, the building of a boat from somebody else's memoirs.

ONE biologist who read this began to wonder. Leguat had said things about the anatomy of the solitary which were correct, as the skeletons proved, but which could not be found in any other book.

While the biologist was still brooding over the article, two French librarians very politely requested that Atkinson answer a few simple questions, to wit:

If Leguat had never rounded the Cape of Good Hope, why do the archives of Cape Town tell about the ship, its arrival, departure and so forth, all with the same dates as given by Leguat? Then, if Leguat never saw Rodriguez, why does the earliest map of the island (other than Leguat's own) name a few places after him? Why are there official reports from Mauritius telling of the arrival, imprisonment and deportation of refugees from Rodriguez? And, finally, why is there correspondence with the fleet commander about the trip to and return from Batavia?

Well, Atkinson did accomplish

one thing. Before him, nobody had doubted the authenticity of Leguat's journal. Now we are sure that it cannot be doubted.

It remains to tell the scientific name of Leguat's solitary. It is *Pezophaps solitarius*. The first of these two names is put together from two Greek words: *pezós*, which means "pedestrian," and *phaps*, which means "pigeon."

Some readers who know something about the dodo's story may have wondered why I did not quote some of the well-known source material about the subject. For example, Sir Hamon L'Estrange's account in his memoirs:

About 1638, as I walked London streets, I saw the picture of a strange fowle hong out upon a cloth and myselfe with one or two more then in company went in to see it. It was kept in a chamber, and was a great fowle somewhat bigger than the largest Turkey Cock, and so legged and footed, but stouter and thicker and of a more erect shape, coloured before like the breast of a young cock fesan, and on the back of dunn or dearc colour. The keeper called it a Dodo, and in the ende of a chymney in the chamber there lay a heape of large pebble stones, whereof hee gave it many in our sight, some as big as nutmegs and the keeper told us that she eats them (conducing to digestion), and though I remember not how far the keeper was questioned therein, yet I am confident that afterwards shee cast them all again.

MY reason for not bringing this up earlier is that this statement almost certainly does *not* refer to the dodo, even though the keeper called the bird by that name. The coloration does not fit the gray Mauritius dodo and certainly not the white Réunion dodo. Nor does the "more erect shape" as compared to the turkey.

As Dr. Hachisuka points out emphatically, this is a description of a bird of the type of the solitary, not of the dodo type. It must have been the use of the name dodo which made earlier researchers accept Sir Hamon's account as one of the dodo and to surmise that this was the specimen which later was in Trade-scant's Museum and finally thrown away.

There have always been some descriptions of a bird from Réunion which did not quite "fit."

There was the narrative of a Frenchman named Carré who went to Réunion in 1668: "I saw a kind of bird in this place which I have not found elsewhere: it is that which the inhabitants call the *Oiseau Solitaire*, for, to be sure, it loves solitude and only frequents the most secluded places; one never sees two or more together; it is always alone. It is not unlike a turkey, if it did not have longer legs."

Another very similar description came from the Sieur DuBois

who arrived in Réunion in 1669. He listed the birds he saw, and when he came to *Solitaires*, he stated: "These birds are so called because they always go alone. They are as big as a large goose and have white plumage with the tips of the wings and tail black. The tail feathers are like those of an ostrich, they have a long neck, and the beak is like that of the Woodcock, but larger; the legs and feet are like those of a turkey."

Carré's and especially DuBois' statements led Strickland to suspect that maybe Réunion had both a dodo and a solitary.

Rothschild, after weighing all the evidence, also said that there must have been two different birds on Réunion, either two kinds of dodos which were quite far apart in appearance, or else one dodo and one solitary resembling the Rodriguez type.

A. C. Oudemans, ten years after Rothschild, took the position that all this was a mistake. The men who reported on them probably were not too observant as regards the moulting stages of the birds. Oudemans' main argument is that nobody described both birds, so to speak, side by side.

This is admittedly sad, yet it so happens that nobody did. But if you read what reports there are, you get the impression that the bird called *solitaire* seems to

have been quite numerous, while the white dodo obviously was not. Moreover, Réunion is large enough so that the two birds could have had different habitats.

Somewhat ironically, Prof. Oudemans himself produced evidence for a solitary in addition to the one on Rodriguez.

During the First World War, Prof. Oudemans, vacationing with his wife, looked at the gable stone of a house in Veere, on the island of Walcheren. The stone said that the bird pictured was an ostrich. It also clearly gave the date: 1561. Oudemans did not need long to see that the bird, whatever it was, was not an ostrich. But it could be a dodo. If so, this was the earliest dodo picture on record.

The picture is reproduced here. Prof. Oudemans sent me a print in 1936 when we had correspondence mostly about the Loch Ness animal.

IT must be a gaunt dodo, Oudemans felt, for it certainly could not be a Rodriguez solitary. Leguat had been very specific about its being tailless with a round feather-covered rear end. Look at the tail feathers, Oudemans wrote. Almost like those of an *Afrikaansch struys* (African ostrich) or like those of a dodo.

Well, the answer is that it was not a Rodriguez solitary but a

Réunion solitary (now called *Ornithoptera solitaria*) and the tail feathers, so prominent on the old Dutch gable stone, are just as prominent in the so-called dodo of Florence, one of the pictures discovered by Dr. S. Killermann. This picture is now taken to portray a male Réunion, while another picture, also discovered by Killermann, shows a female. Comparing this picture with the one of a Rodriguez female by Leguat, one can see how the two birds resembled each other and in what respects they differed.

There is one more picture of the same bird (not reproduced here) which is now at McGill University in Montreal. It is of Italian origin, being picture no. 29 in the so-called "Feather Book" made by Dionisio Minaggio in Milan in 1618. It consists of 156 large pictures with birds, practically all of them hunting scenes.

The interesting point is that the birds are never painted. The real beaks, feet and feathers of birds have been used. Unhappily, the picture of the Réunion solitary is "faked." That is to say that legs and beak have been painted and that the feathers used for the body are those of other birds. But it is undoubtedly the same bird as a dodo of Florence.

That attempts to ship Réunion solitaires to Europe were made

is stated by Carré, who says that two of them were caught to be sent to the king (of France) but aboard ship they died of "melancholy." In a few other cases, shipment must have been successful. The 1561 stone masonry in Holland must have had a model. One male must have arrived in Italy around 1618. We do know that there was one on exhibit in London around 1638 and there is evidence that a female got to Vienna in or about 1657.

THE story has a postscript called the dodo of Nazareth or, more learnedly, *Didus nazarenus*.

I thought the case had been nicely cleared up by Iosif Kristianovitch Hamel of the Russian Imperial Academy of Science in St. Petersburg, which published a fairly long study in its Bulletin of the Physical-Mathematical Section in 1848.

Professor Hamel, after reading all the sources, had found a convincing piece of evidence. You remember from last month's column that the Dutch called the dodos *Walghvogels* or "nauseating birds" because their taste was so atrocious. (One of them declared firmly that the dodo was for wonder, not for food.) The French had translated *Walghvogels* correctly into *oiseaux de nausée*. But one François Cauche,

who spent two weeks on Mauritius in 1638, wrote about the dodos *nous les appellions oiseaux de Nazaret*.

Cauche probably did not try to taste dodo and did not see why the birds should be nauseating, so he thought that the word *nausée* was actually *Nazaret*, which sounds somewhat similar in French. And there was a place called Nazareth nearby on a nautical chart. There still is, but it is now labeled a "bank" while on earlier charts there is an island by that name. Professor Hamel thought this was a simple mistake.

He may be right. But when Prof. Oudemans checked old charts systematically, he found a few in which the name of Nazareth is not placed next to an island where we know that there is no island, but near the existing, if tiny, island which on modern charts appears as *Ile Tromelin*.

Nobody knows much about *Ile Tromelin*. It cannot be of any importance because the latest edi-

tion of the Admiralty Charts states that its position may be five miles off on the map. If it were of any importance, this would surely have been ascertained by now. Maybe the map-makers who produced the old charts seen by Oudemans simply lettered Nazareth next to it because there was supposed to be such a place and it was the only island left in the whole area, the other suspected islands having turned into banks and shoals.

But Oudemans said that *Didus nazarenus* cannot be dismissed completely until *Ile Tromelin* has been carefully investigated. Not that he expected to find live dodos of any kind; he meant sub-fossil remains like those found on Mauritius and on Rodriguez.

In principle, Oudemans is naturally correct; as long as there is an uninvestigated lead left, the book should not be closed.

No such investigation has taken place. But until it is and the facts prove otherwise, I prefer to accept Prof. Hamel's explanation.

— WILLY LEY

