## Labuan<sup>1</sup>

Having for some years past been in constant correspondence with a friend who resides in Labuan<sup>2</sup> I have of course obtained a good deal of information respecting its general History and natural products, and when called upon to furnish a subject for this evening's meeting I chose that which appears on the card, thinking that a few notes upon the productions of the island taken from original letters and memoranda might prove interesting to the Society<sup>3</sup> -

Labuan I need hardly tell you is a small island about 5 miles in length situated on the northern coast of Borneo near the mouth of the river Brune and which a few years ago was ceded to England by the Sultan of Borneo<sup>4</sup>. It has lately attracted much attention in this country from the fact of its possessing an extensive field of very excellent coal<sup>5</sup> and having on this account become the scene of the operations of the Eastern Archipelago Company<sup>6</sup> to whom a large portion of the coal has been leased by Government and who are now carrying on extensive and successful operations for working it. Coal is at present the only article of any moment which is exported from the colony although the soil being excellent it will doubtless be profitably cultivated as soon as the present superabundant vegetation (the whole island being at present almost entirely covered with dense jungle) shall be cleared away - [page2]

Trepang also which is a species of Holothuria<sup>7</sup> much used by the Chinese and the adjacent countries as an article of food abounds on the coast, and now that British industry is exercising itself to develop the resources of the island, a fishery of it will in all probability be established before long.

The vegetation as I before said is most luxuriant, the jungle is so dense that it is almost impossible in many places to penetrate it, while above it tower trees of enormous girth and height - the trunks of these trees are perfectly straight and generally furnished with huge buttresses at the base - I have an account of one tree which measured 120 feet to the first branch and at the butt was about 5 feet in diameter - of another my friend writes as follows "I went out this morning to witness the fall of a tree at which 2 men had been working since yesterday morning; it was a Damak<sup>8</sup> tree very hard and about 4 feet 6 inches in diameter; in consequence of the huge buttresses at the root we were obliged to rig a stage and cut it at about 8 feet from the ground; it lept from the butt in falling about 5 or 6 yards, brought down with it 9 large trees and fell with such force as to shatter all its smaller branches into little fragments 10 to 12 inches long; this tree measured from the ground to the first branch 134 feet". Another ...

[page 3] a Dryabalanops or Camphor tree<sup>9</sup> and which from Mr Motleys account is probably the largest on the island at about 15 ft from the ground is between 6 and 7 feet in Diameter, while it is furnished with such enormous buttresses that at 6 inches above the ground following all its curves it measures 333 feet around -

As connected with the climate and atmosphere of Labuan I may mention the following fact viz, that Kena Baloo<sup>10</sup> a mountain near the North Eastern point of Borneo about 16,000 feet in height and at a distance of about 90 miles from the island in the early morning appears to be so clear and distinct that a person might suppose it to be within a walk as the day advances however and the atmosphere becomes hazy it is quite lost to view -

The population of Labuan is imported and besides the English colonists<sup>11</sup> consists principally of the following races brought there by them as labourers.

1st the Seedies as they are called who are natives of Zanzebar and that part of Africa bordering the Persian gulf but are naturalized in Bombay<sup>12</sup> - they are generally speaking a fine race of men of

great stature and strength - they generally speak Hindostanee though their own language is a kind of Arabic - they are a good tempered and willing race and easily managed - when they quarrel among themselves which however is but seldom, they fight most furiously - [page 4] When speaking of them the Malays who hold them in much contempt say "these black Kaffir men are like buffaloes that have been newly caught very strong but not yet very clever"

2nd There are also some Madras coolies who are good workmen but drunken and deceitful and therefore not to be depended upon.

- 3 The Malays<sup>13</sup> come next and make tractable and good workmen and whose small stature and abstemious habits afford a striking contrast to the gigantic vice and excessive gluttony of the Seedies this latter trait I omitted to mention when speaking of them and is worthy of notice as showing how much a man can eat, the following is the allowance usually provided for 30 of them for a month 9 1/2 cwt Raw rice 1 1/2 cwt of Dholl a kind of peas 60 lbs of Ghee or Buffalo butter about a dozen lbs of spices principally capsicum & turmeric and about 5 cwt of fish besides all this they spend nearly all their wages in procuring other provisions the Malays on the other hand are most abstemious often living for days together on rice alone and that in very small quantities.
- 4 Another race employed in Labuan are from Borneo and appear to be a cross race between some of the original Bornean tribes and the Malays, they are called "Orang Gunong" or Mountain Men<sup>14</sup> and they speak an impure Malay language called by the Malays Jungle talk they are very diminutive in stature [page 5] not being at an average more than 5ft 2 or 3 inches high at the utmost they are excellent woodcutters and soon become very expert in the use of tools. For naturalists too they have the great recommendation of being especially good hunters and fishers, knowing the name of every animal and plant you meet with and are most docile and good tempered. They do not appear to have any religion but believe in a great number of evil spirits, of whom they are much afraid when anything goes wrong however they defy and abuse them most vociferously.
- 5 The Chinamen of whom there a re a good many employed in the island are he last I shall mention and they are for the most part great scamps - when you do get a good Chinaman however he is invaluable but this is rare, they occasionally hold a feast to Joss and Qui<sup>15</sup> or God and the Devil, but as they think that the latter being cunning is usually too many for Joss they are much more earnest in supplicating Qui not to injure them than they are in seeking the protection of Joss. "Their worship consists in burning insense & gilt paper letting off crackers & bumping their heads on the ground; but the great observance seems to be holding what the Malays eloquently call a Eat Eat<sup>16</sup> - "On these [page 6] occasions they will eat all sorts of messes with hardly any cessation day or night for almost a fortnight - Mr Motley writing an account of one of these feasts where one of the worshippers had actually eaten himself to death, says "Frank<sup>17</sup> & I met a man with his hoe on his shoulder and asked him where he had been; he answered very cooly (in the Malay language) "I have planted my neighbour" and when we asked why he had died he said "he had packed very hard his belly" They come to me now for Physic and dont I just serve them out the Calomel 18 & aloes - they are most insensible fellows & medicine for 9 out of 10 smoke opium - I had one man with furious dysentery to whom I gave nearly a wineglass full of Laudanum daily for 3 days without the least effect, & when that failed I gave him (after trying less quantities first of course) 40 grains of Calomel a day for a week before he showed any symptoms of salivation; as a contrast to this I thoroughly salivated a Malay with 4 grains of Blue Pill<sup>19</sup> only assisted by about 6 grains of quinine"

I now pass on to the Fauna of this small island so small indeed that one would not have supposed it to be either very varied or extensive, and at first sight upon taking [page 7] a cursory survey of it one would not be undeceived, as the jungle is so dense, the forest so impenetrable and the heat of

-

the day so great keeping most of the animated tribes in the recesses of the Jungle or among the leaves of the forest, that without careful observation especially about the time of early morning and just before sunset, but few of them are to be seen - after a short residence however the observing naturalist will notice division after division, order after order, family after family, Genus after Genus and species after species successively appear until he will be satisfied that the whole island literally teems with life, and that every great division of the Animal Kingdom is there abundantly represented -

Of Mammalia the first Class to which I shall allude there are at least 2 sorts of Deer a Wild Hog the Sus barvatus 2 species of monkey one species of Pteromys or Flying Squirrel 4 of Sciurus or true Squirrels several bats 1 Rat and 1 Shrew - of these I believe that one of the Squirrels which I have received is a new variety if not species and the Sorex an entirely new and undescribed species - Of the Deer one is the Genus Rusa as large or larger than the Red Deer [page 8] and the other is a beautiful little animal a species of Moschus or Tragulus (Musk Deer) about the size of a hare but of course with longer legs - they are frequently caught by the Malays in snares and are easily tamed as they live however among long grass and are seldom seen - the large Deer has one very peculiar propensity to which I should have alluded when speaking of him, viz that he is very fond of charcoal frequenting those parts of the forest where fire has been used in the clearing and eating the charcoal wood-

Birds are very numerous in the island and I have already in my first box thence<sup>20</sup> received 40 distinct species - some of them new and some though in the collection of the British Museum hitherto undescribed<sup>21</sup>. To give you an idea of their general distribution I may roughly classify them as follows - 1 Hawk 1 Owl 15 Dentirostral<sup>22</sup> birds 3 Conirostral<sup>23</sup> birds 2 Parrots 3 Woodpeckers 5 Sun birds 3 Swallows & Swifts 1 Bee Eater 3 Kingfishers 3 Pigeons 1 Megapodius<sup>24</sup> 2 Herons 4 Plovers & Sandpipers & 1 Tern -

Of Reptiles in the same box I have received 16 distinct species of Snakes and 10 [page 9] lizards, and to these I expect in the next box which is I believe on its way home a very considerable addition - even this number however affords a remarkable contrast to the very limited amount of Reptile life which we find in this temperate region. Besides Lizards & Snakes I know of 2 species of Frogs A Turtle and the Alligator which in the Mangrove swamps bordering on the sea at the mouths of streams is found in abundance and often inflict ugly wounds on the tame buffaloes which resort to them and drink - One of the snakes a Python or Boa sometimes attains the length of 10 or 15 feet and occasions great devastation especially in the poultry yards. Several of the species are poisonous and one of the family of the Trigonocephalic eminently so. One of the lizards is like the Boa I have alluded to a great enemy to poultry but he possesses the redeeming quality of being very good to eat himself. He attains the length of from 2 to 4 feet and may almost be considered a Land Alligator<sup>25</sup> -

Of the Insects Shells Corals & Zoophytes I can only say that their name is legion<sup>26</sup>, that I have reason to believe they are of the most interesting, beautiful [page 10] and varied character and that I expect when my next zoological parcel arrives<sup>27</sup> they alone will afford me abundant ocupation for what spare time I can command for some time to come in arranging them & determining their species and that when I have done so I shall be happy to lay them & the results of my investigations before this Society<sup>28</sup>.

[This note to the transcript was added later, in pencil]

Had I described Habits &tc at length I might have gone on for many hours - my object was only to give a rough outline.

Transcribed and annotated by Martin Laverty, July-Sept 2009, Feb 2010, June 2011 from manuscript notes held at the West Glamorgan Archives of a lecture read to the Royal Institution of South Wales by Lewis Llwellyn Dillwyn at 8pm on Thursday, 8th July, 1852.

Labuan is an island in Brunei Bay off the NW coast of Borneo.

- 2 The friend, as named later, was James Motley (1822-1859), a Yorkshireman whose father had invested in coal, iron, and tin works in South Wales from 1826. He evidently spent some time in South Wales as a youth and worked there as a mining engineer and mineral surveyor after leaving St Johns College, Cambridge, in 1842. He later invested with his father in a pioneer tinworks in Llanelli but this, as with his father's other enterprises, failed and he left for Labuan on the recommendation of LL Dillwyn's father-in-law, geologist Henry de la Beche, in 1849. His subsequent life in the Far East was similarly ill-starred: he left Labuan in 1853, spent most of 1854 in Singapore, Sumatra, and Java before starting work for a Dutch coal mine in SE Borneo. On the eve of his 38<sup>th</sup> birthday he was murdered, as were his wife and 3 children, along with all other Europeans in the area. Throughout, his passion was really for natural history, in which he is said to have followed his father.
- 3 The Swansea Philosophical and Literary Society was founded in 1835, changing its name to the Royal Institution of South Wales when granted a royal charter in 1838. Its Swansea Museum is still open and holds the herbarium assembled by James Motley before he left South Wales for Borneo. However, a collection of 120 species of molluscs from Labuan appears to have been destroyed by bombing during the Second World War.
- 4 Labuan was offered to Queen Victoria by the Sultan of Brunei in 1845; possession was taken on 24<sup>th</sup> December 1846, and became a Crown Colony in 1848. It was seen as a prospective coaling station on the route to China as well as base for anti-piracy operations
- 5 Captain Edward Belcher and Rajah James Brooke had examined the coal in March 1845, following up native reports and an August 1843 examination of coal in Brunei. The Admiralty had already sent out a mineral surveyor (Hiram Williams, another Swansea man selected by Henry de la Beche, who employed his brother in the Geological Survey) to accompany Captain Charles Drinkwater Bethune in his determination of the the best place for a British settlement in the region. A sample weighing 280lb was returned by Mr [Henry] Wise in 1846 and given to the Museum of Practical Geology where it was first assessed as 'more ... candle or cannel coal, than the ordinary bituminous varieties' and subsequently in tests by de la Beche and Lyon Playfair. Mining ceased in 1911 and Labuan is now an offshore financial centre. While at first the coal was reckoned 'better than the finest Newcastle, 40 years later Clutterbuck would describe it as "only 15% inferior to Cardiff"
- 6 The Eastern Archipelago Company was instituted by Henry Wise, a retired East India Company sailor and supracargo who as a merchant in London helped fit out James Brooke's yacht for its voyage to the Far East in 1838, and subsequently acted as Brooke's agent until the two fell out in 1848. The company was granted a royal charter in 1847 but Wise had trouble raising the required capital and operations did not begin until 1849 with Motley, his wife and brother arriving in Singapore in April.
- 7 Holothuria, or sea cucumbers, are echinoderms prized as food and/or medicine in the Far East.
- 8 Damak (ie dammar)is not the name of the tree but a resin obtained from the Dipterocarpaceae family of trees. This family dominates the lowland tree flora of Borneo..
- 9 Motley also wrote to William Hooker at Kew Gardens about the Camphor tree (and much else) and extracts were published both at the time and as recently as 2004.
- 10 Kinabalu is the highest mountain between the Himalaya and New Guinea: now reckoned at 4,095 metres (13,435 ft). It was first climbed by a European in 1852, again in 1858, ... (Wong and Phillips). It is now climbed by thousands every year, but none of them will walk from the coast and back.
- 11 The main settlement on Labuan was Victoria, at the far end of the island from the coal. The European complement included a Governor, lieutenant-governor, colonial secretary (and wife), doctor, surveyor and engineer, shop keeper, garrison commander, and others; most seem to have mainly quarrelled with each other...
- 12 The seedies were negroes: Motley was impressed with their performance as seamen.
- 13 Malays were Muslim people living near the coast or at sea who mainly had indigenous origins except for the aristocracy who may have Arab blood.
- 14 These natives would usually be called Kedayans or Dyaks by the Europeans.
- 15 This account of Chinese religion is very superficial: Joss is thought to be derived from Deus, the Portuguese for God,; Qui would seem to be qi (or ch'i), the life-force of Chinese belief, rather than devil. Chinese religion is polytheistic, but one of the gods will be picked for a family shrine or clan temple.
- 16 The Malay language reduplicates words to indicate plurality, so a less direct translation would just be feast.
- 17 Frank was James' brother, Francis, who acted as his assistant in Labuan
- 18 Calomel is mercurous chloride, a toxic white powder formerly used as a diuretic and purgative.
- 19 Blue pill, (pilula hydrargyri) was a remedy prescribed for various ailments, particularly constipation. It contained 1/3 elemental mercury by weight, mixed with marshmallow, honey of rose, liquorice, glycerin, and inert ingredients to form pills of about 48 grains in weight
- 20 On December 7, 1850, Dillwyn records in his diary that "in the evening I unpacked a box of Zoological specimens & c which have arrived from Labuan from Motley". On a wet and windy New Years' day "in the afternoon made out

- some of the Birds from Labuan sent me by Motley " and on January  $17^{th}$  he "staid at home in the morning writing to Motley & c"
- 21 The British Museum would have specimens sent by Brooke, Hugh Low, and various naval visitors. The birds were not described until P.L Sclater did so in 1863.
- 22 Dentirostral signifies notched beak, typical of insectivorous birds
- 23 Conirostral signifies a conical bill, typical of a finch
- 24 The Megapode, a chicken-like bird, merited its own paper in the Proceedings of the Zoological Society (Dillwyn, 1851) from its distinctive habit of burying its eggs under a mound of decomposing vegetation.
- 25 The monitor lizard a web search suggests that it tastes of chicken once a slight fishy tang is masked
- 26 All that subsequently seems to have appeared about these is a short note on shells by Motley in his geological article, precised by de la Beche.
- 27 On Jan 18th, 1853, Dillwyn "unpacked 2 boxes of Specimens in Zoology from Labuan which have arrived"
- 28 There is no evidence that Dillwyn gave any further talks on Labuan. However, he did prepare the first of a projected series of illustrated volumes on the Natural History of Labuan and the Adjacent Coasts of Borneo. He had met the publisher, John Van Voost, in May 1851, "Went to see Wolf and Ford & went as to my Labuan illustrations" on Dec 16<sup>th</sup>, 1852 and went to see Van Voorst again on 29<sup>th</sup> June, 1855, which was the year when the book was finally published in London. The text was similar in tone to this lecture mixing Motley's observations with more description of the species and their distribution. A selection of species were illustrated in coloured lithographs dated 1854 by J Wolf (2 mammals and 5 birds) and G H Ford (5 snakes). Joseph Wolf (1820-1899) was a German artist who moved to London in 1848 and worked for the British Museum as well as freelance, notably for John Gould. George H Ford (1806-1876) also worked for the British Museum and has been noted as one of the best natural history artists of the 19th century. The book contained 10 Mammalia: a mouse deer, a flying squirrel, 4 squirrels, a shrew; a loris, and a pangolin 40 Birds: an owl, 5 swifts and swallows, 3 kingfishers, 4 sunbirds, a parakeet, a megapode, 3 plovers and 1 sandpiper, 2 herons, a tern One of the kingfishers was subsequently named *Ceyx dillwynni* (sic, Sharpe 1868), and the megapode, *Megapodius dillwyni* (Tweeddale 1877), from *M. lowii* (Sharpe 1875); The kingfisher was subsequently renamed for Motley as a subspecies: *Ceyx erithacus motleyi* (Chasen & Kloss, 1929)

On New Year's Eve, 1859, another wet and windy day, Lewis was "At home unpacking 2 boxes of Birds & other Zoological specimens which I have received from Banjemassing (S. Borneo) collected by poor Mottley".

## References

Bastin, John Journal Malaysian Branch Royal Asiatic Society vol 60, pp 43-54 James Motley and his Contributions to the Natural History of Labuan

De la Beche, H.T. Quarterly Journal of the Geological Society of London v4 (1858) p in Anniversary Address of the President

Belcher, E Narrative of the Voyage of HMS Samarang during the years 1843-1846 (1848)

Burkill, I H Journal Straits Branch Royal Asiatic Society No 79, pp 37-38 The Circumstances attending the Murder in 1859, of the Botanist James Motley

Clutterbuck W J About Ceylon and Borneo (1892)

Denny, Henry The Annals and Magazine of Natural History Vol IV pp 313-317 (1859)

Dillwyn, L Llewellyn Proceedings Zoological Society XIX pp 118-120 (1851) On an Undescribed species of Megapodius [includes letter from Low and says he and Motley have been working together]

Dillwyn, L Llewellyn The Annals and Magazine of Natural History Vol XI pp 469-472 (1853)

Dillwyn, L Llewellyn (1833-1892) The Journal of Lewis Llewelyn Dillwyn (as transcribed by Richard Morris) [http://hdl.handle.net/10512/11]

Hooker, W J On the Camphor-tree of Borneo and Sumatra, Dryobalanops camphora Hooker's Journal of Botany and Kew Garden Miscellany vol IV (1852) pp 200-207 based on letters from Labuan dated May 13<sup>th</sup> and June 13<sup>th</sup> 1851 Keppel, H Voyage of the Dido (184

Motley, James Hooker's Journal of Botany and Kew Garden Miscellany vol VII (1855) 39-47 to WJ Hooker and Mitten 78-84 to Mitten 257-269 to WJH 289-296 Originals at Kew

Motley, James Hooker's Journal of Botany and Kew Garden Miscellany vol IX (1857) pp 148-153 Original at Kew Sharpe, T & McCartney, P (1998) The Papers of H.T.De la Beche (1796-1855) in the National Museum of Wales.

Short, Philip In Pursuit of Plants: Experiences of Nineteenth and Early Twentieth Century (2004)

Tomes, Robert F Proceedings Zoological Society (1858) pp 536-540 Notice of Five Species of Bats in the Collection of LL Dillwyn Esq MP collected in Labuan by Mr James Motley

Walker, A Raymond Minerva, The Journal of Swansea History XIII, pp30-37 James Motley (1822-1859) The Life of a Collector and Naturalist

Wong, K M and Phillips, A. Kinabalu Summit of Borneo (1996)