

parental duties, which are a necessary consequence of that command which went forth at the beginning to weevils as well as to man, 'Increase and multiply.' It is more than twenty years since I first traced the history of this insect, which is a most dangerous enemy to the horticulturist: my observations were then directed to its operations on *Saxifraga sarmentosa*, the crown of leaves and flowering stalks of which I constantly found completely severed from the roots by this subterranean marauder, but I think this is the first time it has been noticed in connexion with ferns."

Insects injurious to Forest-trees.

Captain Cox remarked that *Chrysoclista Linneella* was swarming on the trunks of lime-trees in Hyde Park, the bark of the trees in many places being almost destroyed by the larvæ: he also alluded to the destruction now progressing of many fine elms and other trees in the parks by the *Scolytus*, &c., and regretted that those in authority would not adopt the very simple means to remedy the evil.—*E. S.*

Proceedings of Natural-History Collectors in Foreign Countries.

Mr. A. R. WALLACE.*—"St. Munjon Coal Works, Borneo, 8th April, 1855. You will see by the heading of this letter that I have changed my locality. I am now up the river Sadong, about twenty miles N.E. of Sarawak. A small coal-field has been discovered here, and is now being worked. At present the jungle is being cleared, and a road made to carry the coals to the river side, and it is on account of the scarcity of roads in this country that I thought it advisable to come here. Another reason was, that this is the district of the "Mias" or Orang-utan, the natural history of which I am very anxious to investigate, so as to determine definitely whether or no three species exist here, and also to learn something of their habits in a state of Nature. An English mining engineer has the direction of the works here, and has about a hundred Chinese labourers engaged. I am residing with him, at the foot of the hill in which the coal is found. The country all round us is dead level and a perfect swamp, the soil being a vegetable mud, quite soft, and two or three feet deep, or perhaps much more. In such a jungle it is impossible to walk; a temporary path has, however, been made from the river (about a mile and a half) by laying down trunks of trees longitudinally. Along this path is very good collecting-ground, but many fine insects are daily lost, and butterflies can hardly be captured at all, from the impossibility of stepping out of the path, and the necessity of caution in one's movements

* Communicated by Mr. S. Stevens.

to preserve balance and prevent slipping, not at all compatible with the capture of active tropical insects. The small clearing in which our houses are situated also furnishes me with many good insects among the trunks and stumps, and other decaying timber. Half a mile further on in the jungle, on the hill side, is another clearing, where coal levels are to be opened; and, lastly, the jungle is being cut down to form a road or railway, and which, as it progresses, I expect will offer me very fine collecting-grounds. Having now been here nearly a month I can offer some opinion on its entomological capabilities. Imagine my delight in again meeting with many of my Singapore friends, — beautiful longicorns of the genera *Astathes*, *Glenea* and *Clytus*, the elegant *Anthribidæ*, the pretty little *Pericalus* and *Colliuris*, and many other interesting insects. But my pleasure was increased as I daily got numbers of species, and many genera which I had not met with before. Longicorns I think are more abundant than at Singapore, and more than half of them are new to me. The species, too, run a size larger. Some of the scarcest there are here the most abundant, while many of the commonest of that locality seem to be altogether absent from this. *Curculionidæ* are about equal in number, and there is a fair proportion of novelty. Two or three species closely allied to the *Mecocerus Gazella* are abundant, and many curious *Brenthidæ*. I am paying much attention to the most minute species, and can safely promise abundance of novelty for Mr. Waterhouse. *Carabidæ* are hardly so abundant as at Singapore, but I have some beautiful new *Therates*, *Catascopus* and *Colliuris*, and the curious *Thyreoptera* also occurs sparingly under *Boleti*. The *Cleridæ* seem very similar to those of Singapore, but scarcely so numerous. The *Buprestidæ* I am happy to say are very fine; not that the species run very large, but they are tolerably abundant. One of the most beautiful I make out to be *Belionota sumptuosa*, about an inch long, and of the richest golden copper-colour; it flies with the greatest rapidity, making a loud bee-like hum, and settles on timber only in the hottest sunshine. There are also many smaller species of a dark green, variously marked with lighter green or golden spots (*Chrysobothris* sp.?). Also several slower flying kinds, which when fresh are clothed with a yellow powder, like the *Euchroma gigantea?* of Brazil, which, however, seldom reaches England in that condition, as it is difficult to capture and kill the insect without injuring its delicate covering. I have also some very curious minute species, making altogether thirty-six species of this interesting family collected in Borneo. I also pay much attention to

the Elateridæ, and have many pretty things, especially among the velvety species, with a swollen thorax. Of Heteromera, Erotylidæ, Chrysomelidæ and Trimeræ, I have hosts of curious things, which are daily increasing in number. The only family in which there is an absolute deficiency, is that of the beautiful Cetoniadæ. I have only at present one or two Tænioderas, a fine green and black Coryphocera, and the handsome *Macronota Diardi*, which is, I believe, very rare: I scarcely dare hope to increase my collection of this family to any great extent, as they evidently are only abundant in mountainous and rather open shrub-producing districts, while they are scarcely at all represented in the dense and gloomy jungles which are the favourite haunts of all those insects which at any period of their existence feed on fresh or decaying timber, or on the boleti which grow upon it. Among my latest captures are, my first species of *Paussus*, which I have been long anxiously looking for: I took it in the daytime flying about fallen timber. Two days since I obtained a species of *Malacomaerus*, a Brazilian genus of Longicorns, described and figured by White in the 'British Museum Catalogue,' and yesterday, while at breakfast, a magnificent black and yellow spotted *Lamia* flew into the verandah, and was caught in my hand. I have now 135 species of Bornean Longicorns, and I do not despair of getting 200 before I leave this place, which I mean to work thoroughly.

To give English entomologists some idea of the collecting here, I will give a sketch of one good day's work. Till breakfast I am occupied ticketing and noting the captures of the previous day, examining boxes for ants, putting out drying-boxes and setting the insects of any caught by lamp-light. About 10 o'clock I am ready to start. My equipment is, a rug-net, large collecting-box hung by a strap over my shoulder, a pair of pliers for Hymenoptera, two bottles with spirits, one large and wide-mouthed for average Coleoptera, &c., the other very small for minute and active insects, which are often lost by attempting to drop them into a large mouthed bottle. These bottles are carried in pockets in my hunting-shirt, and are attached by strings round my neck; the corks are each secured to the bottle by a short string. The morning is fine, and thus equipped I first walk to some dead trees close to the house frequented by Buprestidæ. As I approach I see the bright golden back of one, as he moves in sideway jerks along a prostrate trunk,—I approach with caution, but before I can reach him, whizz! — he is off, and flies humming round my head. After one or two circuits he settles again in a place rendered impassable by sticks and bushes, and when he leaves it, it is

to fly off to some remote spot in the jungle. I then walk off into the swamp along the path of logs and tree-trunks, picking my way cautiously, now glancing right and left on the foliage, and then surveying carefully the surface of the smooth round log I am walking on. The first insect I catch is a pretty little long-necked *Apoderus* sitting partly upon a leaf: a few paces further, I come to a place where some *Curculionidæ*, of the genus *Mecopus*, are always seated on a dry sunshiny log. A sweep of my net captures one or two, and I go on, as I have already enough specimens of them. The beautiful *Papilios*, *Evemon* and *Agamemnon*, fly by me, but the footing is too uncertain to capture them, and at the same moment a small beetle flies across and settles on a leaf near me—I move cautiously but quickly on—see it is a pretty *Glenea*, and by a sharp stroke of the net capture it, for they are so active that the slightest hesitation is sure to lose the specimen. I now come to a bridge of logs across a little stream; this is another favourite station of the *Buprestidæ*, particularly of the elegant *Belionota sumptuosa*. One of these is now on the bridge,—he rises as I approach,—flies with the rapidity of lightning around me, and settles on the handle of my net! I watch him with quiet admiration,—to attempt to catch him then is absurd; in a moment he is off again, and then settles within a yard of me; I strike with all my force, he rises at the same moment, and is now buzzing in my net, and in another instant is transferred in safety to my bottle: I wait a few minutes here in hopes that another may be heard or seen, and then go on; I pass some fallen trees, under which are always found some *Curculionidæ*, species of *Alcides* and *Otops*,—these I sweep carefully with my net and get two or three specimens, one new to me. I now come to a large *Boletus* growing on a stump,—I push my net under it, two *Thyreopteræ* run on to the top, I knock one with my hand into my net, while the other has instantly escaped into a crack in the stump and is safe for this day, but his time will come. In some distance now I walk on, looking out carefully for whatever may appear; for near half-a-mile I see not an insect worth capturing; then suddenly flies across the path a fine *Longicorn*, new to me, and settles on a trunk a few yards off. I survey the soft brown mud between us, look anxiously for some root to set my foot on, and then cautiously advance towards him: one more step and I have him, but alas! my foot slips off the root, down I go into the bog and the treasure escapes, perhaps a species I may never obtain again. Returning to the path, another hum salutes my ear, and the fine *Cetonia*, *Macronota Diardi*, settles on a leaf near me, and is immediately secured: a little further, a yellow-

powdered Buprestis is caught in the same manner. Having reached the usual limits of my walk in this direction, I turn back and am soon rewarded by what appears a Colliuris sitting on a leaf, but which is discovered, on capturing it, to be of the equally acceptable Longicorn genus Sclethrus: a little further and a true Colliuris is caught. These insects I have named, from their elegant form, lady-beetles, English names being necessary for the use of my boy Charley, who is now a rather expert collector. During the rest of the walk back, the principal insects I get are two velvety Elaters crawling on the logs, and two or three curious Heteromera in the same situation. Returning by the Chinamen's houses, I find, at an odoriferous puddle, the fine Papilio Iswara, which I capture, as well as a P. Evemon and P. Sarpedon. I then walk to the other clearing, where, among the fallen timber and branches, I get several small Buprestidæ; numbers of the handsome red Eurycephalus maxillosus are here constantly flying about and crawling on the timber. On one tree I find running about with ants, which they much resemble, the curious little short-elytra'd Longicorns, Hesthesis sp. Here also, I get two or three pretty species of Clytus and a Callichroma. Between whiles I have picked up a few flies, wasps and bugs, and have got tolerably filled bottles. Returning home, I find Charley has also had a fair day. We empty our bottles into boiling water, and on pinning and setting our captures, find we have got between us 94 beetles, 51 different species, 23 of which are new to my collection: I have 5 new Longicorns, 2 new Buprestidæ, and 5 new Curculionidæ. I have been out five hours, and consider this a very good day's work. It will be seen that a far larger number of insects can be collected in a day in England, but perhaps hardly such a large proportion of species.

A. R. WALLACE.

Occurrence of the Honey Buzzard (Falco apivorus) near Truro.—A specimen of the honey buzzard was shot last week at Carclew, the residence of Sir Charles Lemon; and it appears that this is the second instance of its occurrence in the same locality, and the only two recorded instances of its appearance in this county. The specimen that was obtained some years since, and which I was previously unaware of, I had an opportunity of cursorily inspecting yesterday at the Royal Institution's Museum at Truro; and it appeared to have a greater preponderance of brown both on the upper and lower plumage than the one recently killed. The under parts are rufous-brown, with a few narrow, transverse bars of white, about six in number, at some distance