The following is a list of tenative identifications which have been made, in previous years, by Arthur Strick:

Boletus sanguines Polyporus squamosus Russula atropurpurea Lactarius subumbonatus Naucoria temulenta Russula emetica Claviaria cineria Lepiota procera Armillaria mellea Armillaria mucida Collybia velutipes Tremella mesenterica Polystictus versicolor Psathyrella disseminata Hygrophorus ceraceus Hygrophorus calyptraeformis Lactaria pubescens

## FUNGI IDENTIFIED ON LUNDY (BEYOND DOUBT)

S. ARCHER

Phragmidium violacearum Melampsora amygdalinae Uromyces scrophulariae Bramble rust
Willow rust
on Scrophularia aquatica
(a rather rare species in the U.K.)

Coprinus atramentarius Serpula lacrymans Panus torulosus Lycoperdon depressum Bovista nigrescens B. plumbea

I could name many others which almost certainly occur on Lundy, but until definitely recorded are best omitted.

## MOSQUITOES, MYXOMATOSIS AND LUNDY

DR. M. W. SERVICE

(The Nature Conservancy, Monks Wood Experimental Station, Huntingdon)

In Britain the principal vector of myxomatosis in wild rabbits is the rabbit flea, Spilopysyllus cuniculi. This vector is absent from Australia where it has been shown conclusively that the disease is transmitted by several species of moquitoes. Some of these are particularly well adapted as vectors because they rest during the day in rabbit warrens and feed on rabbits both below and above the ground. The transmission of myxoma virus is apparently mechanical—that is the virus does not multiply or undergo any biological changes within the vector, but is simply transmitted by direct contamination of the vector's mouthparts. However, insects feeding through normal skin areas of diseased rabbits fail to pick up sufficient virus to become suitably infected. Infection occurs when the insects probe, with their mouthparts, primary, or well developed secondary, lesions and tumours, such as those commonly occurring on diseased rabbits around the eyes and nose. It follows that any insect feeding in this manner on rabbits is a potential vector.

The species of mosquitoes that are vectors in Australia do not occur in Britain, and because there is no evidence that any mosquitoes feed on wild rabbit populations in Britain it has been considered that in this country they are not vectors. During ecological studies on mosquitoes in southern England I became interested in the possibility that mosquitoes might in fact feed, to some extent at least, on rabbits. Various types of traps were therefore baited with rabbits and placed amongst vegetation in areas where there were known to be large mosquito populations. The presence of mosquitoes, some of which had fed on the rabbits, in the traps seemed to indicate that mosquitoes were attracted to rabbits. However it was realised that bait rabbits enclosed within traps presented a very unnatural situation, therefore rabbits were tethered, by wire attached to a collar on their necks, to a tree. This allowed considerable freedom of movement by the rabbits, which were then visited at intervals and any mosquitoes biting, or attempting to bite, collected. Nevertheless even these catches were not made under entirely natural conditions. It was therefore decided to try to collect blood-engorged mosquitoes that rested during the day amongst vegetation so that serological methods could be used to identify the blood-meals in the mosquitoes stomach. Many hundreds of blood-meal identifications were performed on mosquitoes collected by this method and a number of several different species was shown to have fed on wild rabbits. This seemed to prove that mosquitoes were feeding on rabbits, but there remained the slight possibility that all these meals were from comatose rabbits suffering from advanced stages of myxomatosis, and that mosquitoes were incapable of taking a blood-meal from healthy active rabbits. If this was so, then although mosquitoes could readily pick up the virus they would be unable to transmit the disease to healthy rabbits. I therefore looked for an area which had a large rabbit population free from myxamatosis. Lundy island was an obvious choice, and during my short stay in the summer of 1970 I was able to collect a few blood-fed mosquitoes by sweeping grassy and scrub vegetation with a net. Some of these were found to contain rabbit blood. It is inconceivable that all these individuals had fed on healthy rabbits on the mainland and then flown across to the island. It therefore appears that in Britain mosquitoes do, at least under certain ecological conditions, feed on wild healthy rabbits, and are thus potential vectors of myxamatosis. This, however, does not mean that they are important vectors: their role, if any, may be minimal.

## DISCOVERY OF FLINT ARROWHEAD

On May 19th 1970 Mr. P. Atkins while on holiday on Lundy discovered a

perfect flint arrowhead at the northwestern edge of the plateau.

The flint was seen protruding from the peat in an area already known for its neolithic settlement and after excavation was found to measure 33 mm. overall by 22 mm wide. At its thickest point the flint measured 3.5 mm.

## LUNDY FIELD SOCIETY PUBLICATIONS

ANNUAL REPORTS are still available for the years:

1947, 1949, 1953, 1954, 1955, 1956, 1957, 1958, 1969/60

at 15p each (post free)

and for:

1967, 1968, 1969 at 40p each (post free)

A LIST OF THE BIRDS OF LUNDY

by Peter Davis (114 pp. + map) at 25p (post free)

A BIBLIOGRAPHY OF LUNDY (1956)

by the late A. E. Blackwell at 10p (post free)

All publications obtainable from the

Hon. Secretary, 1 Furzefield Road, Reigate, Surrey.