

CONTENTS

iv ACKNOWLEDGEMENTS

1 INTRODUCTION

4 HABITATS

8 PHOTOGRAPHY

APTERYGOTA [Wingless primitive insects]

10 ■ PRIMITIVE INSECT ORDERS

10 ■ Order ZYGENTOMA – SILVERFISH

10 ■ Order ARCHAEOGNANHA – BRISTLETAILS

10 ■ A FEW NOTES ON NON-INSECTS

[The following groups are winged insects (wings develop externally); nymphs resemble small, wingless adults]

PALAEOPTERA

12 ■ Order EPHEMEROPTERA – MAYFLIES

14 ■ Order ODONATA – DRAGONFLIES & DAMSELFLIES

POLYNEOPTERA

42 ■ Order PLECOPTERA – STONEFLIES

44 ■ Order DERMAPTERA – EARWIGS

46 ■ Order ORTHOPTERA – BUSH-CRICKETS, CRICKETS & GRASSHOPPERS

70 ■ Order EMBIOPTERA – WEBSPINNERS

72 ■ Order PHASMIDA – STICK INSECTS

76 ■ Order MANTODEA – MANTIDS

80 ■ Order BLATTODEA – COCKROACHES & TERMITES

PARANEOPTERA

82 ■ Order PSOCODEA – LICE, BARKLICE & BOOKLICE

82 ■ Order THYSANOPTERA – THRIPS

84 ■ Order HEMIPTERA – BUGS

ENDOPTERYGOTA [The following orders are mainly winged insects (wings develop internally during a pupal stage)]

[The first three orders below are often regarded as a group, the Neuropterida]

128 ■ Order NEUROPTERA – LACEWINGS, ANTLIONS & OWLFLIES

136 ■ Order MEGALOPTERA – ALDERFLIES

136 ■ Order RAPHIDIOPTERA – SNAKEFLIES

138 ■ Order COLEOPTERA – BEETLES

224 ■ Order STREPSIPTERA – STYLOPS [also known as TWISTED-WINGED PARASITES]

224 ■ Order DIPTERA – FLIES

254 ■ Order MECOPTERA – SCORPIONFLIES

254 ■ Order SIPHONAPTERA – FLEAS

256 ■ Order TRICHOPTERA – CADDISFLIES

260 ■ Order LEPIDOPTERA – BUTTERFLIES & MOTHS

364 ■ Order HYMENOPTERA – ANTS, WASPS, BEES & RELATIVES

400 APPENDIX 1 – References

402 APPENDIX 2 – Red List species

403 INDEX OF ENGLISH AND SCIENTIFIC NAMES OF INSECTS

GLOSSARY – back endpaper