

ENTOMOLOGICAL SURVEY OF COOMBE PLANTATION AND MOTTISTONE DOWN, ISLE OF WIGHT, 2006.

INTRODUCTION.

Coombe Plantation and Mottistone Down, Isle of Wight are owned and actively managed for wildlife by Wight Conservation. Both these adjoining areas have undergone considerable recent habitat restoration work in an effort to improve their value to wildlife. Both sites are approximately 18 hectares each in area.

COOMBE PLANTATION.

Coombe plantation is an area of mixed plantation woodland, with deciduous trees being considerably more frequent than conifers. Tree species present include Sycamore *Acer pseudoplatanus*, Oak *Quercus robur*, Ash *Fraxinus excelsior*, Sweet Chestnut *Castanea sativa*, Pine *Pinus* sp., Silver Birch *Betula pendula* and *Salix* sp. There are some mature trees present, but there appear to be no truly veteran specimens. The understorey is dominated by Hazel *Corylus avellana* and Silver Birch. Blackthorn *Prunus spinosa* and Hawthorn *Crataegus monogyna* are both scarce within the wood, as is Wild Cherry *Prunus avium*. All three of these shrubs form important pollen and nectar sources in the Spring. Some large specimens of Cherry Laurel *Prunus laurocerasus* are also present. Rhododendron *Rhododendron ponticum* is present in some quantity in the central southern area of the wood. A wide ride runs through the wood from near the South - eastern boundary to a point roughly half way along the northern boundary of the wood. A pond has been created towards the western end of this ride. Smaller tracks are present within the plantation, particularly within the western section of the wood, which is densely shaded in parts. There has been considerable recent clearing or thinning within Coombe Plantation, particularly in the northern sector of the wood.

In terms of ground flora, much of the site is heavily shaded, or has been until the fairly recently, limiting the area receiving good sunlight. The following pollen and nectar sources were noted : Bluebells *Endymion non-scripta* are present in some areas of the wood, and Flowering Currant *Ribes sanguineum* is also present. The main ride supports a number of Primroses *Primula vulgaris* and Figwort *Scrophularia nodosa* is common at the eastern end. Dog Violet *Viola riviniana* is present within the wood. Bramble *Rubus fruticosus* agg. is present along the ride margin, and also within sunny spots within the woodland. Later in the year Common Fleabane *Pulicaria dysenterica* is abundant along the ride edges, and Corn Mint *Mentha arvensis* is present in some quantity. Other species of entomological interest included Buttercups *Ranunculus* sp. and Marsh Thistle *Cirsium palustre*.

MOTTISTONE DOWN.

This area of chalk grassland is undergoing restoration following a period when the site had been heavily scrubbed, and large areas had been planted with trees. An extensive tree removal programme has been undertaken, and much scrub has been cleared. The site is grazed periodically by Highland cattle in order to control scrub invasion. Some scrubby areas have been retained - these are dominated by Gorse *Ulex europaeus*. Some Blackthorn is also present. Within parts of the recently cleared areas Ground Ivy *Glechoma hederacea* is abundant, providing a useful Spring foraging source for bees and other insects. Elsewhere on recently cleared areas Wild Parsnip *Pastinaca sativa* grows in some quantity. Cowslip *Primula veris* is infrequent on the site, although small patches occur, particularly in the North - west of the site. Wild Strawberry *Fragaria vesca* is abundant in places. Towards the South - eastern end of the site there are large exposures of bare chalk which are the remnants of a disused chalk pit. In the eastern sector of the site there are pockets of chalk grassland with typical calcareous grassland indicator species including Common Rock Rose *Helianthemum nummularia*, Horseshoe Vetch *Hippocrepis comosa*, Thyme *Thymus polytrichus*, Small Scabious *Scabiosa columbaria*, Musk Thistle *Carduus nutans*, Dwarf Thistle *Cirsium acaule* and Harebell *Campanula rotundifolia*. Common Rock Rose is abundant around SZ40618454 and SZ40538459. Common Bird's - foot Trefoil *Lotus corniculatus* is also present.

METHODS.

Survey methods were confined to visual searching, the use of a hand net or pooter to capture individual species, sweeping vegetation, beating foliage and grubbing. Both areas were visited on a regular basis throughout the main period of insect activity. Survey commenced on 28th March; the final visit was made on 30th September. a total of 16 visits was made. All visits were made in favourable weather conditions.

RESULTS.

A full list of all insect species recorded during the course of survey is appended as **Appendices 1 and 2**. A number of the species encountered are considered to be Nationally Scarce or Red Data Book species. These are marked as such within **Appendices 1 and 2** and are discussed in more detail below. The status category definitions and criteria for individual species are those devised by the JNCC and are as follows :

STATUS CATEGORY DEFINITIONS AND CRITERIA.

RDB 1 - Endangered.

Taxa in danger of extinction and whose survival is unlikely if causal factors continue operating.

Species which are known or believed to occur as only a single population within one 10km square of the National Grid.

Species which only occur in habitats known to be particularly vulnerable

Species which have shown a rapid or continuous decline over the last twenty years and are now estimated to exist in five or fewer 10km squares.

Species which are possibly extinct but have been recorded in the 20th century and if rediscovered would need protection.

RDB 2 - Vulnerable.

Taxa believed likely to move into the endangered category in the near future if the causal factors continue operating.

Species declining throughout their range.

Species in vulnerable habitats.

RDB 3 - Rare.

Taxa with small populations that are not at present Endangered or Vulnerable, but are at risk

Species which are estimated to exist in only fifteen or fewer post 1970 10km squares. This criterion may be relaxed where populations are likely to exist in over fifteen 10km squares but occupy small areas of especially vulnerable habitat.

Nationally Scarce (Na).

Taxa which do not fall within the RDB categories but which are none - the - less uncommon in Great Britain and thought to occur in 30 or fewer 10km squares of the National Grid.

Nationally Scarce (Nb).

Taxa which do not fall within the RDB categories but which are none - the - less uncommon and thought to occur in between 31 and 100 10km squares of the national Grid.

Nationally Scarce (N).

Species which are estimated to occur within the range of 16 to 100 10km squares.

Additionally, some of the species found are included in either the National or Isle of Wight Biodiversity Action Plan (BAP) species listings. Again, these are clearly marked in **Appendices 1 and 2**.

RARE, SCARCE AND BAP SPECIES RECORDED FROM COOMBE PLANTATION, 2006.

ODONATA.

The golden - ringed Dragonfly *Cordulogaster boltonii* was seen flying around the pond in Coombe Plantation at SZ 40378443 on 23rd June. Although not considered to be Nationally Scarce, until recently this species was considered to be decidedly local on the Isle of Wight. However, recent research has shown that it is widespread on the Island within its chosen habitat of streams and ponds. It is frequently associated with heathland and is a strong flier.

LEPIDOPTERA.

The author was surprised to find a colony of the Nationally Scarce (N) Silver - washed Fritillary *Argynnis paphia* present in Coombe plantation, since the species is typically associated with true semi - natural ancient woodland. The highest number recorded during the survey was of 5 individuals on 21st July. Larvae of this species feed on Dog Violet *Viola riviniana*, which is present along the main ride. The Silver - washed Fritillary is in decline both nationally and locally and is classed as a National Biodiversity Action Plan (BAP) species of conservation concern. It is also an Island BAP species. Locally, the author has previously recorded the Silver - washed Fritillary from Briddlesford Copse, Rowlands Wood, Chillingwood Copse and Walter's Copse. This butterfly has disappeared from many woodlands on the Isle of Wight and it is encouraging to find that it has colonised this woodland plantation. The larval foodplant is susceptible to over - shading so the recent ride management and clearing work is likely to benefit the host plant and in turn the butterfly population.

The White Admiral *Ladoga camilla*, although not considered Nationally Scarce or threatened, is another woodland butterfly worthy of mention, since it appears to also be in considerable national and local decline. This attractive species was present in reasonable numbers in Coombe Plantation, with 10 being noted on 15th July. The White Admiral is still present in several Island woodland areas, but a recent decline gives cause for concern. Larvae of this species feed on Honeysuckle *Lonicera periclymenon* but only utilise plants in very densely shaded areas. Thus over - clearing within a wood can result in the demise of this butterfly.

DIPTERA.

The striking black and yellow Soldierfly *Stratiomys potamida* was recorded on two occasions around the pond at SZ 40378443 on 23rd June and again on 15th July. *S. potamida* is classified as Nationally Scarce (N) and is an Isle of Wight BAP species. The larvae are aquatic, developing in ponds, ditches and seepages. *S. potamida* is predominantly a species of southern England. On the Isle of Wight the author has recorded it from woodlands with ponds and from soft rock cliffs where seepages occur.

The large predatory Robber fly *Eutolmus rufibarbis* was found along the track leading South from the main ride on 15th July. The exact location was close to the boundary with Mottistone Common. This rare (RDB3) species is confined to a relatively few sandy districts in southern England, where it is frequently associated with trees at the edge of open areas. Sites for *E. rufibarbis* are most usually heathland, although it has been recorded from chalk grassland. Locally, the author discovered a considerable colony of *E. rufibarbis* on Mottistone Common during the course of survey in 2001. It is likely that the specimen encountered was using the trees within Coombe Plantation as a vantage point for locating possible prey items. Apart from a single stray found at Alverstone in 1992, the Mottistone area remains the only Island site for the species.

The Dotted Beefly *Bombylius discolor* is considered a Nationally Scarce (N) species, and due to significant recent national decline is included in the National BAP list as a species of national conservation concern. It was encountered regularly in Spring in Coombe plantation visiting the flowers of Primrose which were most abundant at the eastern end of the main ride. Larvae of *B. discolor* are ectoparasitic on the larvae of mining bees, particularly *Andrena flavipes* which was also found in Coombe Plantation. Falk (1991a) notes a considerable recent decline in *B. discolor*, which nationally is largely confined to southern England. However, this fly is widely distributed and not infrequent on the Isle of Wight.

The Nationally Scarce (N) hoverfly *Cheilosia carbonaria* was found along the margin of the main ride on 24th August. This uncommon species appears confined to woodland areas, and is listed by Stubbs (1982) as a strong primary woodland indicator species, although this association appears to be weaker than originally thought. The larval stage is unknown. Locally the author has only previously encountered this species in Walter's Copse and in Rowlands Wood.

The hoverfly *Criorhina ranunculi*, a Nationally Scarce (N) bumblebee mimic, was found in Coombe plantation on 23rd May, visiting *Salix* blossom. Larvae of *C. ranunculi* develop in wet rot cavities at the base of trees, and the species is considered to have a strong association with ancient semi - natural woodland. Most British records are from southern England. Locally, the author has recorded this species from 4 other Island sites, where it is usually encountered as single specimens. In view of its local scarcity and specific habitat requirements, *C. ranunculi* is included in the Isle of Wight BAP listings.

Although not Nationally Scarce, the record of the hoverfly *Heringia vitripennis* is worthy of mention, since it appears to be previously unrecorded from the Isle of Wight. This small species was taken by general sweeping around the ride margins on 15th July. Larvae of *H. vitripennis* are predatory on bugs and aphids. It is associated with a range of woodland types. Most records of *H. vitripennis* are from southern England.

The hoverfly *Volucella inanis*, a wasp mimic, was recorded from Coombe Plantation in late July, when a specimen was seen visiting umbel flowers. Larvae of this species are ectoparasites of social wasps. *V. inanis* is largely confined to South - east England, and is classified as a Nationally Scarce (N) species. Although included in the Isle of Wight BAP listings, *V. inanis* appears to be coming increasingly common on the Island, where it may be recorded in a variety of situations in late Summer.

Xylota xanthocnema was found in Coombe Plantation on 5th September, when a single specimen was captured as it ran across a Sycamore leaf. Larvae of *X. xanthocnema* develop in rot holes of deciduous trees. This Nationally Scarce (N) species is predominantly southern in its UK distribution. Populations tend to be small, and it is unusual to find this species in numbers at a site. Locally, the author has recorded this species from five other woodland sites on the Island.

The conopid fly *Leopoldius signatus* was found visiting Ivy flowers at the eastern margin of Coombe Plantation on September 30th. This Nationally Scarce (N) species is believed to be parasitic in the abdomens of social wasps. *L. signatus* is a late - flying species whose emergence is timed to coincide with the flowering season of Ivy, which is extremely attractive to the social wasps which are its host. Nationally, *L. signatus* is widespread but scarce. Despite having spent a lot of time specifically searching for this species, the author has only encountered *L. signatus* once before on the Island. Several specimens were found by me at Ivy in Totland in 2001. There appear to be no other published records for this species on the Isle of Wight.

The main ride in Coombe Plantation supports a large quantity of Common Fleabane. The picture - winged fly *Myopites inulaedyssentericae* was present in some quantity on this plant during July. Larvae of *M. inulaedyssentericae* develop in the seedheads of the Fleabane. This Rare (RDB3) species is largely confined to southern England. However, on the Isle of Wight *M. inulaedyssentericae* is a regularly recorded species which occurs in a number of habitats where the host plant grows. This species is included in the Isle of Wight BAP listings.

The snail - killing fly *Tetanocera punctifrons* was swept from around the pond edge on 16th June. It is not known whether larvae of this species feed on aquatic or terrestrial molluscs, but adults are usually found in damp situations. Nationally, Falk (1991a) offers about 20 post 1960 sites, which are widely scattered across the British Isles. The author has previously recorded this species on coastal soft rock landslips on the Isle of Wight.

HYMENOPTERA.

The social wasp *Dolichovespula media* was observed visiting the flowers of Bramble on several occasions. This tree - nesting species is believed to be a recent colonist to the UK. It was first recorded in Sussex in 1980, and has subsequently spread quite rapidly. *D. media* does not have restricted habitat requirements. It is classified as Nationally Scarce (Na) by Falk (1991b), although Edwards (1997) notes that it has become widely distributed and suggests that the status of *D. media* should be downgraded. Locally, it remains a fairly scarce species; the author has recorded this large wasp from three other Island sites.

Spring brood specimens of the Nationally Scarce (Nb) mining bee *Andrena trimmerana* were found visiting flowers of Wild Cherry *Prunus avium* around SZ40588450 on 12th April. *A. trimmerana* nests in soft rock cliffs, landslips and on rough grassland. Locally, *A. trimmerana* may be encountered in a variety of habitats - including open woodland - but it is most frequently found on coastal cliffs or rough coastal grassland. Nationally, this species has declined significantly, particularly inland. *A. trimmerana* is predominantly southern in its distribution, with most records from coastal counties. Kent, Sussex and the Isle of Wight remain strongholds for this scarce species.

The small mining bee *Lasioglossum pauxillum* was recorded during July by general sweeping. This species nests in sparsely vegetated light soils in warm, sunny conditions. It may be found in a variety of habitats including calcareous grassland, soft rock coastal cliffs and heathland. Although classified as Nationally

Scarce (Na), *L. pauxillum* is a relatively frequent bee on the Isle of Wight, particularly in coastal locations. However, Falk (1991b) notes a national decline, and the majority of the UK's post 1960 records relate to the southern coastal counties of England. The Isle of Wight is probably one of the national strongholds for *L. pauxillum*.

COLEOPTERA.

The discovery of the Harlequin ladybird *Harmonia axyridis f. spectabilis* at the eastern end of the wood was an unwelcome surprise. This Asiatic species was first recorded in Britain in 2005, from South - east England, but it rapidly spreading northwards and westwards. *H. axyridis* is a large species of ladybird, which is a voracious predator likely to out - compete our native species in the search for aphids and scale insects. Additionally the Harlequin ladybird has been known to eat other ladybird species, butterfly eggs and larvae and lacewing larvae. The species has been recorded at least three other times on the Island in the last two years and is likely to be well established in the near future. The specimen was found on 30th September.

A number of these species and other species recorded are specifically associated with ancient or overmature deciduous trees. Stubbs (1982) selected species of hoverfly which he considered to be "primary woodland indicator" species, and placed them in 3 categories : H1 - strong, H2 - good and H3 - weak. Alexander (2002) produced a provisional annotated checklist of invertebrates of living and dead timber for the UK. **Appendix 3** lists those species recorded during the current survey which appear in either or both of these publications, and briefly notes their larval requirements.

RARE, SCARCE AND BAP SPECIES RECORDED FROM MOTTISTONE DOWN, 2006.

LEPIDOPTERA.

The Dark Green Fritillary *Argynnis aglaja* was recorded on the Down during July and August, although numbers appear to be quite low. Larvae of this species feed on Common Dog Violet *Viola riviniana*, which is quite widely scattered across the site. This butterfly is classified as Nationally Scarce (N) and in view of a major local decline over the last few decades, the Dark Green Fritillary is included in the Isle of Wight BAP listings.

Brook and Compton Downs are the island stronghold for the Dark Green Fritillary on the Island. As habitat restoration progresses on Mottistone Down, it is likely that numbers of this attractive butterfly will increase.

Although not considered Nationally Scarce, the Grayling butterfly *Hipparchia semele* has undergone a major local and national decline in recent decades, so it was heartening to find this species in reasonable numbers at Mottistone Down in July and August. A count of 9 specimens was recorded on 21st July. The Grayling favours the area around the old chalk pit at the south - east of the site, around SZ405845. Larvae of this butterfly feed on several species of grasses. The grayling is an Isle of Wight BAP species.

The Nationally Scarce (N) butterfly the Adonis Blue *Lysandra bellargus* was found to be present in small numbers on the Down, particularly at the eastern end of the site around the chalk pit. Larvae feed on Horseshoe Vetch *Hippocrepis comosa*, which grows in small quantities around the chalk pit. Although a number of relatively strong colonies occur on chalk downland sites on the Island, the Adonis Blue has declined considerably on a national scale. Although there are signs of a recovery in recent years, the Adonis Blue remains a national BAP priority species.

Small numbers of the Chalkhill Blue *Lysandra coridon* were found flying on Mottistone Down in August. This is another Nationally Scarce (N) chalk grassland species whose larvae feed on Horseshoe Vetch, and like the Adonis Blue, it has declined considerably on a national scale. Because of the current limited distribution of the foodplant on Mottistone Down, most specimens were seen around the chalk pit at the eastern end of the site. It is considered a national BAP species of conservation concern. Some Island populations of Chalkhill Blue, for example that on Littleton Down, may number several thousand individuals in good years.

Caterpillars of the rare (RDB3) Glanville Fritillary *Melitaea cinxia* were found crawling across a path on 4th May. At least 10 individuals were seen; they were scattered over some distance suggesting the presence of several webs on the site. Adults were recorded on each visit during June, with a maximum count of 9 individuals on June 16th. This butterfly is now native only to the Isle of Wight within the UK, and is largely restricted to coastal localities along the South of the Island between Sandown Bay and Compton Bay. Glanville Fritillaries occasionally form inland colonies along the chalk ridge, although these are usually transitory in nature. It is therefore interesting to note that Pope (1999) states that the Mottistone Down colony was present in 1989, and he considered it to be the most stable inland colony for the species. The

larvae feed on Ribwort Plantain *Plantago lanceolata*. In view of its highly restricted distribution, the Glanville Fritillary is included in the national BAP listings as a species of conservation concern.

Small numbers of the diurnal Six - belted clearwing moth *Bembecia scopigera* were observed flying around clumps of Bird's - foot Trefoil *Lotus corniculatus*, the larval foodplant of *B. scopigera*. This plant is thinly distributed within the site, particularly in the more southerly sections of the Down. Adult specimens of the Six - belted clearwing were observed flying rapidly around the flowers of this plant on July 21st. This nationally scarce (Na) species is found quite regularly along the soft rock cliffs of the Island where *L. corniculatus* is present, but the author only occasionally recorded it inland on the Island. Nationally it has a scattered distribution through England as far North as Yorkshire. It has also been recorded in Wales. *B. scopigera* is included in the Isle of Wight BAP listings.

DIPTERA.

The Hornet Robber Fly *Asilus crabroniformis* is one of Britain's largest fly species, reaching a body length of up to almost 30 mm. It was present in low numbers on Mottistone Down in late Summer. Adults of this formidable insect prey upon large insects including grasshoppers, bees and wasps, beetles and other robber flies. Larvae develop in dung, particularly that of cattle, horses and rabbits, where they prey upon the larvae of dung beetles. Main strongholds for the Hornet Robber Fly are now centred around the southern heaths and chalk downland, and it remains a reasonably common insect on the Isle of Wight where suitable habitat occurs in conjunction with large grazing animals. Elsewhere, and particularly in East Anglia, *A. crabroniformis* has suffered major recent declines. These are in part due to habitat loss and fragmentation, but also due to the widespread use of avermectins which clear gut parasites in domestic stock, but which make the resultant dung from these animals toxic to dung beetles in certain circumstances. Concerns for the future of this Nationally Scarce (N) species are such that it is classified as a national BAP Priority species.

The Dotted Beefly *Bombylius discolor* is also a national BAP Priority species. It was recorded regularly in late April and May on Mottistone Down, where it was mainly visiting Ground Ivy, which grows over a considerable area of the site. This species was also recorded from Coombe Plantation, and its habits and distribution are discussed in the previous section.

The hoverfly *Criorhina ranunculi* was also recorded from both Mottistone Down and Coombe Plantation. On Mottistone it was observed visiting Blackthorn flowers near the gate to Coombe Plantation at SZ40318549 on 26th April. Since this species develops in dead wood, it is probable that it had left its true habitat in Coombe Plantation to visit the Blackthorn flowers. Details of its requirements and distribution are discussed in the section on Coombe Plantation.

The rare (RDB3) thick - headed fly *Myopa extricata* was caught visiting Blackthorn blossom on 12th April at the South - eastern end of the Down. This fly lays its eggs on the abdomen of mining bees and the larvae develop as solitary internal parasites within the host bee. Although Falk (1991a) cites only two post 1970 localities for this species, Clements (pers. comm.) knows of modern records for at least five English counties. Most records for *M. extricata* are from chalk grassland. Locally, the author has found *M. extricata* at several other Isle of Wight localities.

HYMENOPTERA.

The eumenid wasp *Odynerus melanocephalus* was found in small numbers visiting flowers of Bird's Foot Trefoil on 16th June. This species provisions its nests with weevil larvae. Preferred nesting sites are on level soil with a clay content. Classified by Falk (1991b) as Nationally scarce (Na), *O. melanocephalus* is in serious decline and is under consideration as a possible national BAP species in any future review. Nationally it has been lost from many inland sites, and current strongholds for *O. melanocephalus* are Kent and the Isle of Wight (Edwards, 1997). The author records it at coastal sites on the Island's landslips in most seasons, but it very infrequently found inland on the Island.

A queen of the social wasp *Dolichovespula media* was found visiting Blackthorn blossom on 26th April. This Nationally Scarce (Na) species was also recorded from Coombe plantation and is discussed in the previous section.

The Bee - wolf *Philanthus triangulum* was recorded in small numbers on Mottistone Down in July. This impressive insect was formerly confined nationally to two permanent sites on the Isle of Wight, but over the last fifteen years has spread dramatically. Previously designated as a nationally vulnerable (RDB2) species, it is now considered to be provisionally nationally scarce. *P. triangulum* requires sunny sandy slopes in which to nest. Nests are provisioned with adult Honey bees *Apis mellifera*.

Andrena labiata, a Nationally Scarce (Na) mining bee with an obligate association with Germander Speedwell, was recorded from Mottistone Down on the 4th May. The host plant is present sparingly in several areas of the site. Falk (1991b) reports a considerable national decline in the distribution and populations of this bee, and cites around 25 post - 1970 sites. *A. labiata* is mainly confined to sites in southern England on sandy soils. Locally, the author has recorded *A. labiata* at five other Island sites, including the nearby Mottistone Common but it is seldom present as more than a few individuals at a site.

Sphecodes crassus, a Nationally Scarce (Nb) cuckoo bee, was found on Mottistone Down on 12th May. It is a cleptoparasite of several species of small mining bee of the genus *Lasioglossum*. *S. crassus* is widely distributed but scarce in England, and has been recorded from both calcareous and sandy soils. Locally, the author has recorded *S. crassus* from six other Island sites.

The rare (RDB3) nomad bee *N. lathburiana* was recorded at the North - western end of the Down on 4th May. It was flying around Gorse flowers. This bee is a cleptoparasite of the mining bee *Andrena cineraria*. This host was formerly essentially northern in its UK distribution, but has expanded southwards over the last few decades. It is now well established on a number of Island sites. The cleptoparasite *N. lathburiana* is most common in northern England, but has also expanded its range southwards with its host. The map in Edwards & Telfer (2002) demonstrates the recent range expansion, and they suggest that the status of *N. lathburiana* may require review.

COLEOPTERA.

The colourful leaf beetle *Cryptocephalus aureolus* was swept from areas with Common Rock Rose on the 3rd and 16th June. This Nationally Scarce (Nb) species is largely restricted to lightly grazed grassland, although it also occurs on sand dunes. It is associated with herbs, especially Hawkweeds *Hieraceum spp.* and Rock Roses. *C. aureolus* adults are pollen feeders. It is widely distributed but scarce in England and Wales. Unfortunately, local distribution data is currently unavailable

The Nationally Scarce (Na) beetle *Drilus flavescens* was recorded on the Down on two occasions in June. Larvae, and probably adults of *D. flavescens* are specialist predators on molluscs. Although the adult males are fully winged, females are apterous and have a larval appearance even in their adult form. *D. flavescens* is almost totally confined to calcareous soils, where it may be found in grassland or at wood edges. It has a very restricted range being largely confined to the South - east England from the Isle of Wight to Kent (Alexander, 2003). Locally, *D. flavescens* has been recently recorded from several calcareous grassland sites, and from a woodland edge in the centre of the Island.

DISCUSSION.

Entomological survey in Coombe Plantation and on Mottistone Down during 2006 produced a total of 259 species of insect. Of these, 5 species are classed as Red Data Book species, and a further 23 species are considered to be Nationally Scarce. Together this represents almost 11% of the total number of species recorded. Fourteen species listed in the Isle of Wight BAP listings were recorded, of which 2 were National BAP priority species and a further 4 were national BAP species of conservation concern. These are highly creditable totals, particularly in view of the fact that both sites until recently had been unmanaged for some time.

COOMBE PLANTATION.

Survey at Coombe plantation produced 2 Red Data Book species and 12 Nationally Scarce species of insect. These included 7 species included in the Isle of Wight BAP listings, of which one was a National BAP priority species and another was a species of national conservation concern. These would appear to be encouraging totals for what is a comparatively young wood.

It was encouraging to find the localised woodland butterflies Silver washed Fritillary and White Admiral present, since both species are more usually associated with relict ancient semi - natural woodland. Both are in national and local decline.

Within the Diptera, the hoverflies are well known to have many species specifically associated with ancient woodland or dead or decaying wood. Within the 58 species of hoverfly recorded from Coombe Plantation, 12 were listed by Stubbs (1982) as primary woodland indicators. Two of these were strong (H1) indicators, 6 were good (H2) indicators and 4 were weak (H3) indicators. Whilst this does not match totals recorded from older Island woodlands such as Briddlesford Copse woodlands, Borthwood Copse or Rowlands Wood and

Chillingwood Copse , it compares favourably with the survey results for a number of Island woodlands including Priory Wood, Walter's Copse and Wroxall Copse. Additionally, a further 15 insect species listed by Alexander (2002) as being associated with dead or living timber were recorded.

It is worthy of note that a number of species appear to have already colonised or at least utilised the pond. Seven species of odonata, including the Isle of Wight BAP species the Golden - ringed Dragonfly were observed around the pond. The Nationally Scarce (N) soldierfly *Stratiomys potamida*, another Island BAP species was also recorded around the pond on two occasions.

MOTTISTONE DOWN.

Survey on Mottistone Down produced records of 3 Red Data Book insects and a further 14 Nationally Scarce species, although two of the latter (*Criorhina ranunculi* and *Dolichovespula media*) are woodland species utilising nearby pollen or nectar sources on the Down. Nine Island BAP species were found, of which two are National BAP priority species and 3 were species of national conservation concern.

The eastern half of the site, and particularly the area around the disused chalk pit currently has a variety of chalk downland dependent plant species, and was also the most productive area for insects associated with calcareous grassland .

The butterfly fauna included 3 national BAP species of conservation concern and 5 Isle of Wight BAP species, all of which are associated with calcareous grassland. All of these species are in national decline. Butterflies recorded on Mottistone Down include most of the chalk downland specialists recorded from nearby Brook and Compton Down, which is recognised as being one of the most important downland butterfly sites on the Island. As habitat restoration on Mottistone Down continues to progress, it is possible that colonisation by species from Brook Down may occur. Since the two sites are in close proximity it is likely that some species will be able to form metapopulations with local migrations between the two sites occurring.

For comparison the table below shows the chalk grassland species recorded by the author from the two sites during the course of survey :

		Mottistone Down 2006	Brook & Compton Down 2003
Argynnis aglaja	Dark green fritillary	present	present
Callophrys rubi	Green hairstreak	present	present
Cupido minimus	Small blue	absent	present
Erynnis tages	Dingy Skipper	present	present
Hamearis lucina	Duke of Burgundy	absent	present
Hipparchia semele	Grayling	present	absent
Lysandra bellargus	Adonis blue	present	present
Lysandra coridon	Chalkhill blue	present	present
Melitaea cinxia	Glanville Fritillary	present	absent
Pyrgus malvae	Grizzled skipper	absent	present

Given that the population of Duke of Burgundy is so small at Brook Down, it is unlikely that this species could colonise Mottistone Down. Small Blue tends to form small, compact colonies and again the author feels it unlikely that this will colonise from Brook Down. The author was surprised not to have recorded Grizzled Skipper on Mottistone Down. If this species was not overlooked during the current survey it is possible that colonisation could occur .

Although habitat restoration on this site is still ongoing, and until recently much of the area was wooded, a number of chalk grassland dependent insects were recorded from Mottistone Down. **Appendix 4** tabulates these species, and briefly lists their requirements.

MANAGEMENT CONSIDERATIONS.

COOMBE PLANTATION.

Much recent clearing, thinning and coppicing has been undertaken, which will improve the ground flora and be of considerable benefit to many insect species. However, the western end of the wood remains largely densely shaded and extension of the management work to include further thinning and clearing here would be of benefit. It should be borne in mind that some species do require densely shaded areas - for example the White Admiral, so shaded areas should not be totally eradicated.

Features of wood decay such as rot holes and sap runs are scarce within Coombe Plantation, as is standing dead timber. It would be advantageous to retain these features wherever possible. Additionally, where branches have been cut and log piles have been made, retention of some of this timber on site would be beneficial.

The main ride in Coombe Plantation is developing a useful flora, as is the small ride leading from it to Mottistone Common. However tracks leading westwards from these two main rides are still overgrown and largely densely shaded. It would be beneficial if these tracks could be widened or at least made more open in places to provide more small sunny openings along them. The few "miniature glades" that currently exist along these tracks are currently actively sought out by a variety of insects which are attracted to the Brambles and other flowers that grow in them.

There is a lot of Rhododendron in the central area of Coombe Plantation, particularly towards the South of the wood. Whilst the flowers are attractive to a number of insect species, most of the plants are too densely shaded to be of significant value. Furthermore, this is a particularly invasive species, and if the intention is to retain some Rhododendron I would advocate that it kept in check.

Blackthorn, Hawthorn and Wild Cherry are all scarce within Coombe Plantation. All three species form extremely important Spring pollen and nectar sources and should be retained wherever possible.

MOTTISTONE DOWN.

Much of this site was until recently, afforested. Clearing has been undertaken, together with scrub management and the institution of grazing. Whilst much of the site cannot yet be described as chalk grassland, the actions which have been undertaken should allow the original habitat to recover.

Long term objectives for the site should aim to produce a situation where a matrix of areas of short sward grassland, ranker grassland, low scrub and more mature scrub areas exist, with short sward chalk grassland being the dominant habitat type.

Bare ground, which provides nesting opportunities for ground nesting hymenoptera and other insects, should be retained where possible. A range of gradients, from vertical to horizontal aspects should ideally exist, since different species have various requirements. Other insect species enjoy basking on bare ground, since it is quick to warm up. The Grayling is a good example. There is comparatively little bare ground at the western end of the site, and consideration should be given to retaining that which is present.

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Appendix 1.

List of insect species recorded from Coombe Plantation, 2006.

Species	Status	BAP listing
ORTHOPTERA	(Grasshoppers & Crickets)	
Leptophyes punctatissima		
Meconema thalassinum		
Pholidoptera griseoptera		
Tetrix subulata		
DERMAPTERA	(Earwigs)	
Forficula auricularia		
HEMIPTERA	(True Bugs)	
ACANTHOSOMIDAE	(Shield bugs)	
Acanthosoma haemorrhoidale		
Elasmostethus interstinctus		
COREIDAE	(Squash bugs)	
Coreus marginatus		
PENTATOMIDAE	(Shield bugs)	
Dolycoris baccarum		
Pentatoma rufipes		
RHOPALIDAE	(Squash bugs)	
Rhopalus subrufus		
ODONATA	(Dragonflies & Damselflies)	
Aeshna cyanea	Southern Hawker	
Anax imperator	Emperor Dragonfly	
Cordulogaster boltonii	Golden - ringed Dragonfly	IOW BAP
Enallagma cyathigerum	Common Blue Damselfly	
Libellula depressa	Broad bodied Chaser	
Pyrrhosoma nymphula	Large Red Damselfly	
Sympetrum striolatum	Common Darter	
LEPIDOPTERA	(Butterflies & moths)	
BUTTERFLIES		
Aglais urticae	Small tortoiseshell	
Aphantopus hyperantus	Ringlet	
Argynnis paphia	Silver washed Fritillary	Nationally Scarce (N) UK BAP SOCC
Coenonympha pamphilus	Small heath	
Inachis io	Peacock	
Lasiommata megera	Wall	
Limnitis camilla	White Admiral	
Maniola jurtina	Meadow Brown	

Melanargia galathea	Marbled White
Ochlodes venata	Large skipper
Pararge aegeria	Speckled Wood
Pieris brassicae	Large White
Pieris napi	Green veined white
Pieris rapae	Small White
Polygonia c - album	Comma
Polyommatus icarus	Common Blue
Pyronia tithonus	Gatekeeper
Thymelicus sylvestris	Small skipper
Vanessa atalanta	Red Admiral
Vanessa cardui	Painted lady

DIPTERA

(True Flies)

PTYCHOPTERIDAE

Ptychoptera albimana

STRATIOMYIDAE

(Soldierflies)

Beris chalybata

Chloromyia formosa

Sargus bipunctatus

Sargus iridatus

Stratiomys potamida

Nationally Scarce (N)

IOW BAP

RHAGIONIDAE

(Snipeflies)

Chrysopilus cristatus

Rhagio lineola

Rhagio tringarius

TABANIDAE

(Horseflies)

Haematopota pluvialis

Tabanus autumnalis

ASILIDAE

(Robberflies)

Dioctria rufipes

Eutolmus rufibarbis

Rare (RDB3)

Machimus atricapillus

BOMBYLIIDAE

(Beeflies)

Bombylius discolor

Nationally Scarce (N)

UK BAP Priority species

Bombylius major

DOLICHOPODIDAE

(Long headed flies)

Chrysotus gramineus

Dolichopus festivus

Dolichopus griseipennis

SYRPHIDAE

(Hoverflies)

Brachyopa scutellaris

Brachypalpoides lentus

Cheilosia albipila

Cheilosia albitarsis

Cheilosia bergenstammi

Cheilosia carbonaria

Nationally Scarce (N)

Cheilosia fraterna

Cheilosia grossa

Cheilosia honesta

Cheilosia pagana		
Cheilosia proxima		
Cheilosia variabilis		
Cheilosia vernalis		
Chrysogaster solstitialis		
Chrysotoxum bicinctum		
Chrysotoxum festivum		
Criorhina berberina		
Criorhina floccosa		
Criorhina ranunculi	Nationally Scarce (N)	IOW BAP
Dasysyrphus tricinctus		
Dasysyrphus venustus		
Epistrophe eligans		
Epistrophe grossulariae		
Episyrphus balteatus		
Eristalis interruptus		
Eristalis pertinax		
Eristalis tenax		
Eupeodes corollae		
Eupeodes luniger		
Ferdinanda cuprea		
Helophilus pendulus		
Heringia vitripennis		
Leucozona lucorum		
Melangyna cincta		
Meliscaeva auricollis		
Melanostoma mellinum		
Melanostoma scalare		
Merodon equestris		
Myathropa florea		
Neocnemodon vitripennis		
Parasyrphus punctulatus		
Parhelophilus versicolor		
Pipiza luteitarsis		
Pipiza noctiluca		
Platycheirus albimanus		
Platycheirus peltatus		
Platycheirus rosarum		
Rhingia campestris		
Scaeva pyrastris		
Sphaerophoria scripta		
Syritta pipiens		
Syrphus ribesii		
Syrphus vitripennis		
Volucella bombylans		
Volucella inanis	Nationally Scarce (N)	IOW BAP
Volucella pelluscens		
Xylota segnis		
Xylota sylvarum		
Xylota xanthocnema	Nationally Scarce (N)	
CONOPIDAE	(Thick - headed flies)	
Conops quadrifasciatus		
Leopoldius signatus	Nationally Scarce (N)	
Myopa testacea		
Physocephala rufipes		
Sicus ferruginea		
TEPHRITIDAE	(Picture - winged flies)	

Cerajocera tussilaginis
Myopites inulaedyssentericae Rare (RDB3) IOW BAP
Tephritis bardanae
Xyphosia miliaris

OTITIDAE (Picture winged flies)
Otitis guttata

BIBIONIDAE (Fever flies)
Bibio marci
Dilophus febrilis

SCIOMYZIDAE (Snail killing flies)
Tetanocera punctifrons Nationally Scarce (N)

TACHINIDAE (Tachinid flies)
Phasia hemiptera
Servillea lurida
Tachina fera

HYMENOPTERA (Bees, Wasps & Allies)

SYMPHYTA (Sawflies)
Allantus cinctus
Arge ustulata
Macrophya annulata
Rhogogaster viridis
Tenthredo livida
Tenthredo temula

POMPILIDAE (Spider hunting wasps)
Anoplius nigerrimus
Priocnemis perturbator

EUMENIDAE (Potter & Mason wasps)
Symmorphus gracilis

VESPIDAE (Social wasps)
Dolichovespula media Nationally Scarce (Na)
Vespula vulgaris

SPHECIDAE (Solitary wasps)
Ammophila sabulosa
Argogorytes mystaceus
Cerceris arenaria
Cerceris rybyensis
Crabro cribrarius
Ectemnius lituratus
Entomognathus brevis
Mellinus arvensis
Nysson spinosus

ANDRENIDAE (Mining bees)
Andrena chrysoceles
Andrena clarkella
Andrena denticulata

Andrena dorsata
Andrena flavipes
Andrena fulva
Andrena haemorrhoa
Andrena minutula
Andrena nigroaenea
Andrena pubescens
Andrena scotica
Andrena trimmerana Nationally Scarce (Nb)
Andrena wilkella

HALICTIDAE (Mining & Cuckoo bees)

Halictus tumukorum
Lasioglossum albipes
Lasioglossum calceatum
Lasioglossum lativentre
Lasioglossum morio
Lasioglossum pauxillum Nationally Scarce (Na)

MEGACHILIDAE (Solitary bees)

Chelostoma florissomne
Hoplitis spinulosa
Megachile willughbiella
Osmia aurulenta

ANTHOPHORIDAE (Flower & Nomad bees)

Anthophora bimaculata
Nomada flava
Nomada goodeniana
Nomada marshamella
Nomada panzeri
Nomada ruficornis
Nomada striata

APIDAE (Social & Cuckoo bees)

Apis mellifera
Bombus hortorum
Bombus lapidarius
Bombus lucorum
Bombus pascuorum
Bombus pratorum
Bombus terrestris
Bombus vestalis

COLEOPTERA (Beetles)

ATTELABIDAE (Leaf - rolling weevils)

Apoderus coryli
Deporaus betulae

CANTHARIDAE (Soldier beetles)

Cantharis nigra
Cantharis pallida
Cantharis rufa
Malthodes marginatus
Rhagonycha fulva

CERAMBYCIDAE	(Longhorn beetles)
Clytus arietis	
Grammoptera ruficornis	
Leptura melanura	
Strangalia maculata	
CHRYSOMELIDAE	(Leaf Beetles)
Cryptocephalus moraei	
COCCINELLIDAE	(Ladybirds)
Coccinella 7 - punctata	
Halyzia 16 - guttata	
Harmonia axyridis f. spectabilis	
Propylea 14 – punctata	
CURCULIONIDAE	(Weevils)
Sitona regensteinensis	
ELATERIDAE	(Click beetles)
Agriotes pallidulus	
Athous haemorrhoidalis	
Dalopius marginatus	
PYROCHROIDAE	(Cardinal beetles)
Pyrochroa serraticornis	
SCAPHIDIIDAE	(Fungus beetles)
Scaphidium quadrimaculatum	
SCARABAEIDAE	(Dung beetles and Chafers)
Aphodius sphaicalatus	
Melolontha melolontha	
Onthophagus coenobita	
Onthophagus similis	
SILPHIDAE	(Sexton beetles)
Nicrophorus vespilloides	

Appendix 2.
List of insect species recorded from Mottistone Down, 2006.

Species	Status	BAP listing	
ORTHOPTERA	(Grasshoppers & Crickets)		
Pholidoptera griseoptera			
DERMAPTERA	(Earwigs)		
Forficula auricularia			
HEMIPTERA	(True Bugs)		
PENTATOMIDAE	(Shield bugs)		
Dolycoris baccarum			
LEPIDOPTERA	(Butterflies & moths)		
BUTTERFLIES			
Aglais urticae	Small tortoiseshell		
Aphantopus hyperantus	Ringlelet		
Argynnis aglaja	Dark Green Fritillary	Nationally Scarce (N)	IOW BAP
Callophrys rubi	Green Hairstreak		
Coenonympha pamphilus	Small heath		
Colias croceus	Clouded yellow		
Erynnis tages	Dingy skipper		
Hipparchia semele	Grayling		IOW BAP
Inachis io	Peacock		
Lycaena phlaeas	Small Copper		
Lysandra bellargus	Adonis blue	Nationally Scarce (N)	UK BAP Priority species
Lysandra coridon	Chalkhill Blue	Nationally Scarce (N)	UK BAP SOCC
Maniola jurtina	Meadow Brown		
Melanargia galathea	Marbled White		

Melitaea cinxia	Glanville Fritillary	Rare (RDB3)	UK BAP SOCC
Pieris brassicae	Large White		
Pieris rapae	Small White		
Polyommatus icarus	Common Blue		
Pyronia tithonus	Gatekeeper		
Thymelicus sylvestris	Small skipper		
Vanessa atalanta	Red Admiral		
Vanessa cardui	Painted lady		

MOTHS.

Bembecia scopigera	Six - belted Clearwing	Nationally Scarce (Na)	IOW BAP
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DIPTERA

STRATIOMYIDAE

Chloromyia formosa

(True Flies)

(Soldierflies)

ASILIDAE

Asilus crabroniformis

Dioctria rufipes

(Robberflies)

Nationally Scarce (N)

UK BAP Priority species

BOMBYLIIDAE

Bombylius discolor

Bombylius major

(Beeflies)

Nationally Scarce (N)

UK BAP Priority species

SYRPHIDAE

(Hoverflies)

Brachypalpoides lentus

Cheilosia albipila

Cheilosia bergenstammi

Cheilosia grossa

Cheilosia pagana

Cheilosia proxima

Chrysotoxum bicinctum

Criorhina ranunculi

Epistrophe eligans

Episyrphus balteatus

Eristalis arbustorum

Eristalis interruptus

Eristalis pertinax

Eristalis tenax

Eupeodes luniger

Helophilus pendulus

Melangyna cincta

Meliscaeva auricollis

Melanostoma scalare

Myathropa florea

Paragus haemorrhous

Platycheirus albimanus

Platycheirus manicatus

Rhingia campestris

Sphaerophoria scripta

Syritta pipiens

Syrphus ribesii

Syrphus vitripennis

Nationally Scarce (N)

IOW BAP

CONOPIIDAE

Myopa extricata

(Thick - headed flies)

Rare (RDB3)

Sicus ferrugineus

TEPHRITIDAE (Picture - winged flies)

Cerajocera tussilaginis
Sphenella marginata
Tephritis bardanae
Terrellia ruficauda
Terrellia serratulae

BIBIONIDAE (Fever flies)

Bibio marci
Dilophus febrilis

SCIOMYZIDAE (Snail killing flies)

Pherbellia cinerella

TACHINIDAE (Tachinid flies)

Tachina fera

HYMENOPTERA (Bees, Wasps & Allies)

POMPILIDAE (Spider hunting wasps)

Anoplius nigerrimus
Priocnemis susterai

EUMENIDAE (Potter & Mason wasps)

Odynerus melanocephalus Nationally Scarce (Na)

VESPIDAE (Social wasps)

Dolichovespula media Nationally Scarce (Na)
Vespula vulgaris

SPHECIDAE (Solitary wasps)

Ammophila sabulosa
Cerceris arenaria
Crossocerus podagricus
Ectemnius continuus
Lindenius albilabris
Philanthus triangulum Provisionally Nationally Scarce (Nb)

COLLETIDAE (Mining & Yellow - faced bees)

Colletes daviesanus
Hylaeus annularis
Hylaeus brevicornis
Hylaeus confusus

ANDRENIDAE (Mining bees)

Andrena dorsata
Andrena flavipes
Andrena labiata Nationally Scarce (Na)
Andrena nigroaenea
Andrena scotica
Andrena wilkella

HALICTIDAE (Mining & Cuckoo bees)

Halictus tumulorum
Lasioglossum calceatum

Lasioglossum fulvicorne
Lasioglossum morio
Sphecodes crassus Nationally Scarce (Nb)

MEGACHILIDAE (Solitary bees)

Anthidium manicatum
Hoplitis claviventris
Hoplitis spinulosa
Megachile versicolor
Osmia aurulenta
Osmia leaiana
Osmia rufa

ANTHOPHORIDAE (Flower & Nomad bees)

Anthophora bimaculata
Anthophora plumipes
Nomada goodeniana
Nomada lathburiana Rare (RDB3)
Nomada marshamella

APIDAE (Social & Cuckoo bees)

Apis mellifera
Bombus hortorum
Bombus lapidarius
Bombus lucorum
Bombus pascuorum
Bombus pratorum
Bombus terrestris

COLEOPTERA (Beetles)

CANTHARIDAE (Soldier beetles)
Rhagonycha fulva

CARABIDAE (Ground & Tiger beetles)
Cicindela campestris

CERAMBYCIDAE (Longhorn beetles)
Grammoptera ruficornis
Leptura melanura
Strangalia maculata

CHRYSOMELIDAE (Leaf beetles)
Cryptocephalus aureolus Nationally Scarce (Nb)

COCCINELLIDAE (Ladybirds)
Coccinella 7 - punctata

DRILIDAE (Snail - eating beetles)
Drilus flavescens Nationally Scarce (Na)

SCARABAEIDAE (Dung beetles and Chafers)
Onthophagus joannae
Onthophagus similis

APPENDIX 3.

PRIMARY WOODLAND INDICATOR AND DEAD WOOD DEPENDENT SPECIES RECORDED FROM COOMBE PLANTATION.

SPECIES	STATUS IN STUBBS	DEVELOPMENTAL REQUIREMENTS.
Brachyopa scutellaris	H2	Sap runs in overmature trees.
Brachypalpoides lentus	H1	Decaying Beech heartwood.
Cheilosia carbonaria	H1	Larval requirements unknown.
Cheilosia lasiopa	H2	Larval requirements unknown
Criorhina berberina	H2	Decaying heart rot or rot holes.
Criorhina floccosa	H3	Decaying wood.
Criorhina ranunculi	H2	Fungus infected wet rot cavities.
Epistrophe grossulariae	H3	Aphidophagus on tree feeding aphids.
Ferdinandea cuprea	H2	Sap runs in overmature trees.

Myathropa florea	—		Wet decaying wood and rot holes.
Pipiza luteitarsis	—	H3	Larvae aphidophagus.
Xylota segnis	—		Decaying sap and sap runs.
Xylota sylvarum	H3		Decaying roots of broadleaved trees.
Xylota xanthocnema	H2		Larvae in rot holes.
Bibio marci	—		Very decayed wood or soil
Dilophus febrilis	—		Very decayed wood or soil
Symmorphus gracilis	—		Nests in holes in wood.
Ectemnius lituratus	—		In beetle burrows in dead wood.
Chelostoma florissomne	—		Nests in dead wood.
Apis mellifera	—		Nests in standing hollow trees.
Malthodes marginatus	—		Decaying wood or under bark on dead timber.
Clytus arietis	—		Dead deciduous trees.
Grammoptera ruficornis	—		Dead twigs or small branches of broadleaved trees.
Leptura melanura	—		Larvae in thin decayed branches.
Strangalia maculata	—		Moist rotten wood and stumps.
Pyrochroa serraticornis	—		Larvae live under bark.
Scaphidium quadrimaculatum	—		Fungivorous in rotting timber.

APPENDIX 4.

CHALK GRASSLAND DEPENDENT SPECIES RECORDED FROM MOTTISTONE DOWN, 2006.

SPECIES

Dark Green Fritillary
Green Hairstreak
foot
Dingy Skipper
Grayling
Adonis Blue
Chalkhill Blue
Glanville Fritillary
Six - belted Clearwing
Asilus crabroniformis
Myopa extricata

DEVELOPMENTAL REQUIREMENTS.

Larvae feed on Dog Violet.
Larvae feed on a variety of plants including Gorse, Rock Rose and Bird's
trefoil.
Larvae feed on Bird's foot trefoil, usually on chalk.
Larvae feed on grasses. Adults like open sunny ground.
Larvae feed on Horseshoe Vetch.
Larvae feed on Horseshoe Vetch.
Larvae feed on Ribwort Plantain in sunny positions.
Larvae feed on Bird's foot trefoil, usually on chalk.
Larvae feed on Dung beetle larvae on unimproved grassland and heath.
Larvae parasitoid of aculeate Hymenoptera. Usually on chalk grassland.

Odynerus melanocephalus	Requires sparsely vegetated grassland. Thought to collect weevil larvae from Bird's foot trefoil to provision nests.
Cryptocephalus aureolus	Feeds on Common Rock Rose on chalk grassland.
Drilus flavescens	predatory on snails, usually on chalk grassland.