



Habitat fragmentation pilot study: Insect mobility

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Insect mobility

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This report includes the results of two studies conducted in 1993 and 1994

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HABITAT FRAGMENTATION PILOT STUDY 1993

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Project aims

To develop and test a system of mass marking and recapture of insects applicable to the investigation of the effects of habitat fragmentation on woodland insects.

Project background

For most woodland insect species the consequences of habitat fragmentation are largely unknown. There is a lack of detailed information on:

1. Minimum habitat size required by true woodland insects.
2. The extent to which 'edge' species penetrate into woodland areas
3. The mobility of woodland species within woodland blocks
4. The role edge structure, linking features and patterns of adjacent land-use play in influencing the movement patterns of individuals and hence their role in population isolation.

To address these questions it is critical to understand mobility patterns, but detailed investigations of single species are rarely feasible. They are time consuming, but more importantly information about individual species mobility is lacking and the types of species which may function as reliable indicators of the effects of fragmentation is uncertain.

To determine a suitable methodology a pilot study of mobility, using a grid of Malaise Traps in part of Grendon & Doddershall Wood , Bucks was undertaken from July to September 1993.

Study Site

Grendon & Doddershall Wood are an extensive area of semi-natural ancient woodland in part of the Clay Vale of Oxfordshire and Buckinghamshire. Much of the woodland is impenetrable overgrown coppice, though coppicing is being revised in one part. The wood is surrounded by a mixture of permanent pasture, arable crop and set-aside, the last being on previously cultivated cereal fields.

Because of the nature of the site, only one location was found which was suitable for the requirements of the study; an area of woodland and an adjacent field where a grid could be established without the confounding factors of woodland on two sides of the open area and where the traps in the open area did not interfere with any agricultural practices.

The site selected (Figure 1) (N.G.Ref. SP700212) is on the eastern edge of Grendon Wood and at the time the Malaise Trap grid was established consisted of a part of the wood in which much of the old coppice had been cut, but left lying on the ground together with an adjacent set-aside field that had been cut in early June. The wood and field were separated by an untrimmed blackthorn hedge which extended approximately 8 metres beyond the original wood boundary (marked by a ditch and bank) into the field. This hedge was between 5 and 10 metres tall but had been opened (between traps 13 and 14) at one point to allow vehicle access to the wood.

Malaise Trap Grid

Twenty-five Malaise traps were erected on 21-22 July in five rows parallel to the wood edge (Figure 1). Within row distances were 16m and between row distances 25m. Alternate rows were offset by 8 metres and all traps were orientated with their long axis parallel to the wood edge, an arrangement designed to maximise interception of between row movements. Rows containing traps 1-5 and 6-10 were in the field, the latter between 5 and 10 metres from the wood edge, dependent on the width of the blackthorn hedge. Trap line 11-15 was between 2 and 5 metres from the original wood boundary. This and trap line 16-20 were mostly in cleared coppice. At the start of the first pilot study trap line 21-25 was approximately 10 metres from uncleared coppice, but by the time the second study begun the coppice had been cleared a further 20-30 metres into the wood. Traps 11, 16, 20, 21, 24 and 25 were within uncleared coppice. In addition a single Malaise Trap (26) was erected in a bamboo frame and suspended at a height of approximately 6m. on the woodland side of trap line 21-25. This trap was suspended at the approximate height of the shrub canopy. It was not over the canopy as originally planned for two reasons. It could not be hauled through any nearby shrub vegetation and to erect it any further from the main grid of traps would greatly reduce the chance that any insects marked on the grid would be caught in this trap.

First trial

With the exception of the central traps on the two outer and middle rows (Traps 3, 13 & 23) all traps were left without collecting vessels until 23 July. Insects were collected live in these central traps for a period of 24 hours. At the end of

this period the live collected insects from each trap were transferred to a large collecting jar containing a small quantity of U.V. fluorescent powder. This was gently rotated to dust the collected insects. Different colours were used at each location. Marked insects were released midway between adjacent trap lines(Figure 1). All traps were then set up for sampling by placing a small piece of Vapona™ (active ingredient dichlorvos vapour) in the upper collecting chamber of the trap head. Collected insects were removed after 48 hours and again after a total sampling period of 96 hours. Sampling was then continued until 2 August, a total duration of 240 hours since initial marking. All collected insects were sorted under a U.V. light source to identify any marked insects and then transferred to 70% alcohol.

Results of first trial

Only one marked insect was recaptured.

Identified problems

1. The number of marked insects was probably too low (c.150).
2. Cool showery weather during the study may have limited the number of live captures and subsequent recaptures over the experimental period.
3. There was some mortality of live collected insects, approximately 25% had died during the 24 hour collecting period. However, those which were marked and alive appeared to be fully active. Following the marking the top of the collecting vessel was removed and about 50% of marked insects actively flew away. The remainder were gently tipped onto the ground vegetation and after a period of about 5 minutes appeared to be fully active. Most had flown away, the remainder had actively moved to settle on vegetation and litter.
4. The long term effects of marking insects by dusting with powder and the retention time of these powders was not known.
5. There were additional problems associated with the trap heads, live insects tended to collect in the fixed, lower, vessel, as did the majority of dead insects. Their removal necessitated removal of the trap head from the Malaise Trap.

Modifications

After consultation with Drs Martin Drake, Keith Kirby and Keith Porter it was decided to repeat the work but to mark more insects to increase the chance of recapture. To this end it was decided to live trap at all Malaise Traps but to use line specific marks. Although this eliminated any possibility of recognising any trap to trap movements the main aims of the investigation would not be

compromised. To reduce mortality during the live trapping period it was also decided to introduce egg-cartons into the vessels to provide shade and shelter. It was also decided to mark a selection of insects and retain these insects in caged conditions to determine whether dyes were retained for the duration of the investigation. It was also hoped that a window of warm and calm weather conditions would occur to improve the chance of success.

Retention of dyes.

A random sample of insects (c.50) were collected by hand netting in an overgrown garden, and subjected to the same marking procedure as used in the Malaise trapping exercise, though they were not retained in a trap head for a maximum of 24 hours. They were then released into two 0.5m x 0.5 x 0.5m netted cages placed over a mixture of flowers in a partially shaded border. Both cages received full sun from 10.00 -12.00 a.m. After 48 hours seven insects had died and after 96 hours the cumulative number of deaths was 12. More importantly, powder was visible to the naked eye, though the amount had been reduced by cleaning and activity. All live insects were released.

Second trial

Before this trial commenced all trap heads had been removed, cleaned with detergent and dried. However the first attempt at live trapping failed, with 100% mortality in all trap heads. Despite the cleaning it was obvious that the dichlorvos had migrated into the plastic of the trap heads. Trapping was continued until new heads were obtained.

Before trapping commenced further clearance of coppice growth had taken place, making Traps 21-25 a further 20 metres from the shrub edge.

Active live trapping commenced on 31 August 1993. The same marking technique was employed on 1 September as previously, but row specific colours were used. All marked insects were released midway between adjacent traps of the line on which they were captured i.e. 8 m from the location of capture.

Approximately 50-100 insects were marked and released from each trap. In this trial mortality during live capture still occurred but was less than previously. These trap heads were removed and the original, contaminated heads restored, with Vapona™ sticks. Samples were collected after a period of 48 and 96 hours since the release of marked insects. Collected insects were sorted as before. During the whole of this trapping period the weather was more suitable for insect flight activity but average temperatures and sunshine hours were below the seasonal average. There was no rainfall and low wind speeds during this period. At the end of this period all the traps were dismantled and removed.

Results of second trial

More insects were recaptured than previously (Table 1). Although the total number of recaptures may appear low, making any interpretation difficult the overall analysis of movement demonstrates that there is inherent mobility in the species recaptured. Of equal interest is the location of field recaptures of woodland marked insects. Most of these were recaptured in those field traps nearest to the hedge gap. However detailed interpretation is dependent on comparison of the marked and unmarked samples. It should be assumed that the live trapped and released organisms are a random subset of the total unmarked insects captured at any location. Whether particular taxonomic groups or species are more likely to be recaptured than others is not known. Although most of the recaptured insects are Dipteron species the small number of recaptures probably precludes any detailed analysis.

Problems

1. In this second trial problems still persisted with mortality during live trapping.
2. Weather may have reduced activity during the trial.
3. Continued clearance of the site immediately before the trial may also have reduced trap captures.

Interpretation and suggestions

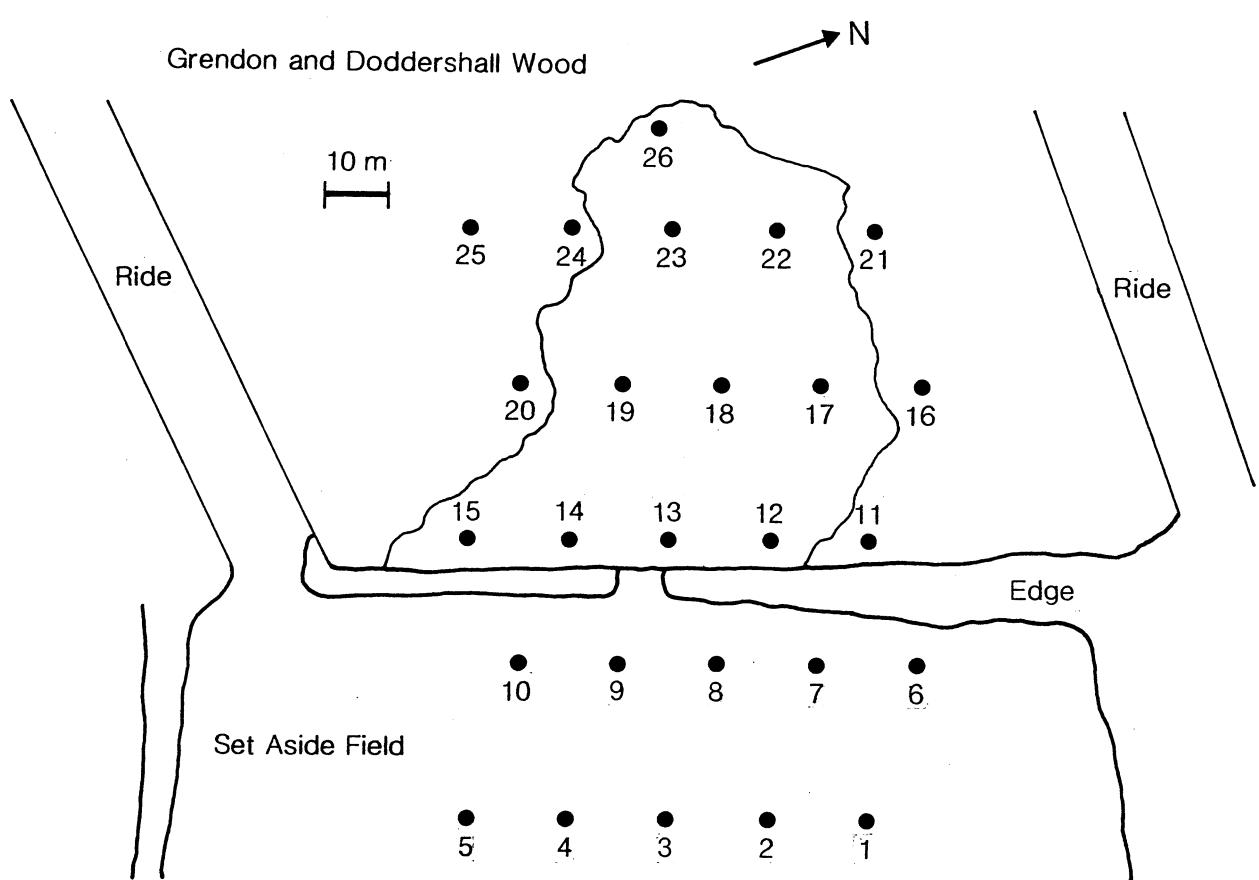
Overall, the technique has been shown to be of potential, and with refinement may prove of use in studies of fragmentation and mobility. It may also be applicable to the study of the use of linking features, especially linear corridors between sites.

One of the major problems has probably been the study site itself. The area used was atypical of woodland because the only area where the traps could be erected was in the one area where coppicing was being regenerated. Over much of the site there was no shrub layer and much of the cut shrub layer was left on site. If this project is repeated a different woodland area must be selected.

The study was probably not undertaken at the best time of year, by the time new trap heads were available and a suitable window in the weather occurred it was the end of September. Given the generally poor weather in the mid and late summer of 1993 the second trap run was probably too late.

Improvements could be made to the method of marking. To overcome mortality during live trapping a shorter period of retention should be used, but this would compromise the total number of insects marked. In addition the actual number of marked insects is not known, in these trials only a visual estimate was made. To address both these problems a trap head could be designed for continuous marking and counting, using a system of powder coated baffles and a single exit with an associated counter. Such a counter could be produced using a custom electronics at a low cost. This method of marking would also be less labour intensive than that used here.

Table 1. The number of insects marked and released on five Malaise Trap lines on 1 September 1993 and recaptured on 3 and 5 September 1993 in woodland and adjacent set aside land at Grendon and Doddershall Wood, Bucks.



HABITAT FRAGMENTATION PILOT STUDY 1994

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SUMMARY

1. A mark-recapture exercise using Malaise traps was conducted in Brasenose Wood, Oxfordshire (N.G.Ref SP 560054) between 7 August and 9 September 1994 to evaluate the use of fluorescent powders and continuous live marking as a method of determining mobility patterns of woodland insects.
2. Three marking traps and 25 capturing traps were evenly spaced on a five row grid (15m between traps and 20 metres between rows) which crossed a gradient from within a coppiced woodland core to an uncultivated field adjacent to the wood. Traps were placed adjacent to the marking traps to enable the quantity of composition of the marked samples to be estimated.
3. Most recaptures were of Diptera and the frequency of recaptures is in accordance with that expected if insects were moving at random within the study site. Members of all families presumed to be marked were not recaptured.
4. The study has demonstrated that for the marked specimens the method can detect differences between the movements of insects initially marked in woodland, woodland edge and field locations. It may thus be a method which is suitable for the determination of edge effects and identification of minimal core size in studies of woodland fragmentation.
5. To improve recapture rates it is suggested that the number of marking traps is increased. This will only have a marginal effect on field work intensity and initial sorting of field collected insects.
6. The method may also be of use in determining long distance movements of insects between habitat patches.
7. For complete evaluation of the effectiveness of the method it is suggested that the method is applied on a larger spatial scale than that used here.

Aims of the 1994 field experiment

To develop and test a system of mass marking and recapture of insects applicable to the investigation of the effects of habitat fragmentation on woodland insects.

Background to the trial

1. Previous trials (1993) had used live Malaise trapping over a 24 hour period, marking with fluorescent powders and mass release followed by recapture at 48 and 96 hour intervals. Several problems were identified. These were: mortality during live trapping, low numbers of recaptures and unquantified numbers of unidentified species being released. The method was also labour intensive with frequent visits to the study site being required for both the marking procedure and during the recapture period.

2. This years trial refined the method of marking, attempted to quantify the numbers of marked insects and reduced the number of man hours involved in the field work.

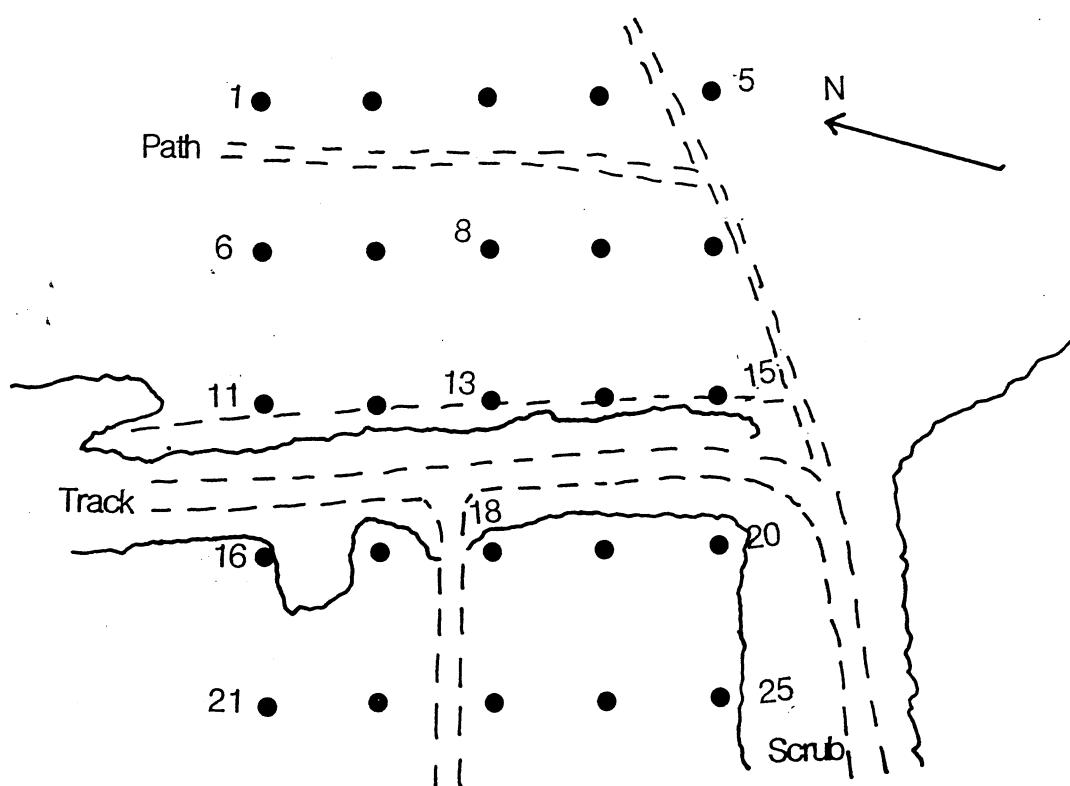
Study Site and Malaise Trap Grid

All work was conducted in Brasenose Wood, Oxford, (N.G. Ref. SP 560054) part of Shotover Country Park owned by Oxford City Council. This area of semi-natural ancient woodland was selected for two reasons. First it is actively managed as coppice-with-standards and provides a site with a relatively stable management regime. It has a defined edge and in parts it has adjacent fields which are not under any commercial management regime, allowing traps to be placed outside the wood for prolonged periods without interfering with agricultural activities. The second criterion for its use was its proximity to Oxford Brookes University. The site had public access and the presence of park rangers was thought to circumvent any likely interference by the public. However, three traps were periodically interfered with during the study.

The site selected (Figure 1) was on the western edge of Brasenose Wood. The woodland part comprised of one compartment which had been coppiced in 1992 with vigorous coppice regrowth of approximately 2 to 5 metres. The woodland edge consisted of a tall (5 metres) blackthorn hedge, bordering a track and ditch and within the wood a further edge of between 5 and 10 metres width of mixed hazel, blackthorn and hawthorn of approximately 5 metres height. Outside the wood the Malaise trap grid extended into an area of scrub and grassland, the latter being mown annually in early July.

A grid comprising 25 trapping locations were established on 7 August 1994 with trap lines running parallel to the wood edge (Figure 1). Within row trap distances were designed to be 15m and between row distances 20m. Some slight variation in distances (max. 5 metres) were inevitable because of the presence of standards or an impenetrable shrub layer. Where this arose traps were kept on the trap lines but placed as near to the required location to provide a clear space for flight interception and to permit access. All traps were oriented N-S, parallel to the wood edge. Traps 1-5 and 6-10 were within the wood , traps 11-15 within the wood edge and adjacent to the edge and traps 16-20 and 21-25 in the field and scrub adjacent to the wood.

0  10 m



8, 13, 18 - marking traps

Marking and recapture

Marking traps were butted in line against each of traps 8, 13 and 18. These traps were designed to continuously mark insects and were adjacent to existing traps so that the adjacent traps could provide a quantitative measure of the faunal composition of the marked insects. This method of enumeration was used in preference to the previously proposed method of electronic counters because in a pilot study of using these counters it was found that small insects (<2 mm long) did not always trigger the counter and insects passing the counter were occasionally counted multiple times if they 'hesitated' on their way past the counter. In addition, the use of counters alone provides no means of identifying what has been marked.

The marking traps were placed centrally in the grid to maximise the chance of marked insects being recaptured elsewhere. The marking traps consisted of 30 cm of 50 mm. diameter plastic waste pipe with a glued lining of thick grade cotton bump (long pile brushed cotton). This tube replaced the normal trap head and was angled down to prevent ingress of moisture during rain. To begin marking the flocking was charged with powder dye (H.Haeffner & Co. Fiesta Daylight A series fluorescent colour range) by blowing powder into the tube using a reversed pooter. Trap 8 was charged with blue powder (Comet Blue 60), Trap 13 with pink (Astral Pink 1) and trap 18 with yellow (ARC Chrome A6). Each tube was initially charged on 7 August and then recharged at twice weekly intervals. Marking and release was continuous throughout the period of the study. All collecting was in conventional Malaise trap heads, insects were dry trapped and killed using Vapona sticks inserted in the upper part of the head. All traps were emptied at twice weekly intervals from 9 August to 9 September.

In the first week samples were sorted using a safe UV light source but a stronger UV source, used in a darkroom, was found to be more effective in detecting small quantities of fluorescent powders. All collected insects were sorted to identify marked insects. Those that were marked were further separated by the location of the traps where they were marked by the fluorescent colours. All sorted insects were retained in date and trap specific tubes in 70% alcohol. In addition insects from Traps 8, 13 and 18 (adjacent to the marking traps) and from those from Traps 5, 7, 14, 19 and 21 were subdivided into Coleoptera, Diptera, Hymenoptera and other orders to facilitate comparison of marked fractions, the three named orders being the most abundant recaptured orders. Coleoptera were identified to the species level by Alex Williams and the Diptera from Traps 8, 13 and 18 only by Peter Chandler. Hymenoptera were separated out but not identified.

Results

Marking and sorting

In comparison to the method employed last year, it was evident that the continuous method of marking insects was a highly efficient method of mass marking. The actual number of insects that were marked was not enumerated. After preliminary observations of the action of one trap over a two hour period, when insects were observed leaving the marking tube, it was concluded that the marking method was suitable for the trial. The tube itself with its lining provided approximately 10 mm clear space in the centre of the tube. As the tube was 30 cm long it would be highly

unlikely that an insect would be able to fly through this tube without coming into contact with the powder.

If it is assumed that the collecting traps adjacent to the marking traps provide a fair representation of what is marked then the running of a collecting trap next to the marking trap provides a quick field method to enable the numbers and composition of the marked samples to be determined. However, the accurate identification of what is marked requires specialist time but can provide valuable information. This is best illustrated by the detailed analysis of the Diptera (Appendix 1) provided by Peter Chandler. Simple enumeration of what is collected can be much quicker; to count to order takes approximately 1-2 hours with moderate to large samples if the sorter can identify the most common orders with ease.

The powders selected for this trial came from the Daylight A series range produced by H.Haeffner & Co. Of the three colours, yellow proved to be slightly unstable in the field, deteriorating to an orange colour over a period of about seven days. However, this colour change did not affect the stability of fluorescence under UV light.

Marked insects were never covered in powder and to the naked eye it was not obvious if they were marked. Marked insects could only be determined by the presence of powder grains trapped at, for example, the wing base, on hairs or on the leg joints. With the method adopted it was possible to determine that some insects had been double marked, entering two different marking tubes. One problem identified was that some flies had fluorescent patches on their wings identical to that produced by the blue powder. Determination of whether they were marked or not could be decided by the extent of the fluorescence and its location. Marked individuals had obvious patches of powder. However, this effect raises doubts about the efficiency of using this particular powder in the marking tube. Such a powder may present a UV stimulus to certain insect species and it could act as a stimulus for avoidance or act as an attractant.

Recapture data

Total recapture numbers for all marked species are shown in Appendix 1. The majority of recaptures were of Dipteran species. Recaptures were identified from all traps except trap 15. The numbers of marked and recaptured Coleoptera and Diptera from each of the marking traps is shown in Table 1 and 2. Full species lists of Diptera and Coleoptera are shown in Appendix 2 and 3.

Of importance to the determination of the effectiveness of the trapping exercise is a comparison of recapture rates with that expected by chance. Malaise traps operate as interception traps and are dependent on insect flight activity. It is possible to calculate the probability of recapture from either the area of the trap baffle or the volume that an individual trap samples. To use the former assumptions have to be made about the linearity of insect flight and flight step length between turns. In addition the proportion of the total ground area that an individual trap samples has to be calculated in relation to each marking trap. This is dependent on trap orientation to the marking trap and inter-trap distance. As the traps were not exactly positioned on the marking grid such a calculation cannot be made and the prime assumption of linearity of flights from a marking trap may also invalidate such a calculation. A less

Table 1. The number of marked and recaptured Coleoptera in Brasenose Wood,
9 August to 9 September 1994.

SPECIES RECAPTURED	NUMBER MARKED AT TRAP			NO. RECAPTURED FROM TRA		
	8	13	18	8	13	18
<i>Coccinella septempunctata</i>	1	0	3	0	1	1
<i>Propylea quattuordecimpunctata</i>	14	2	12	0	0	2
<i>Longitarsus luridus</i>	65	54	44	1	0	0
All other Coleoptera	240	273	176	0	0	0

Table 2. The number of marked and recaptured Diptera in Brasenose Wood, 9 Aug. to 9 Sep. 1994

SPECIES	TRAP 8		TRAP 13		TRAP 18	
	Marked	Recaptured	Marked	Recaptured	Marked	Recaptured
TIPULIDAE						
<i>Tipula paludosa</i>	1		0	1	2	1
KEROPLATIDAE						
<i>Neoplatyura modesta</i>	4		2		9	1
MYCETOPHILIDAE						
<i>Acnemia nitidicollis</i>	30		16	1	9	
<i>Mycetophila fungorum</i>	1			1		
DOLICHOPODIDAE						
<i>Medetra abstrusa</i>	5	1	1		3	
<i>Medetera truncorum</i>	5		1		34	2
<i>Medetera sp.</i>	1		1	1		
PHORIDAE						
<i>Diplonevra concinna</i>	12	1	9		1	
<i>D.nitidula</i>	65		95		61	1
<i>D.pilosella</i>	11		22	1	59	
<i>Diplonevra sp.</i>	7	1	4	1	21	1
<i>Megaselia sp.</i>	220		172	1	593	4
SYRPHIDAE						
<i>Episyphus balteatus</i>	36		7	2	45	2
<i>Epeodes latifasciatus</i>		1				1
<i>Sphaerophoria scripta</i>		1				
<i>Helophilus pendulus</i>		1	1			1
DRYOMYZIDAE						
<i>Dryomyza analis</i>	1		2	1	1	
SCIOMYZIDAE						
<i>Coremacera marginata</i>		2				
HELEOMYZIDAE						
<i>Suillia affinis</i>	1		2	1	3	
<i>S.bicolor</i>			1	1		
<i>S.ustulata</i>		1				
<i>S.variegata</i>	7	1	10		6	
EPHYDRIIDAE						
<i>Hydrellia sp.</i>						1
<i>Limnellia quadrata</i>	11				4	1
ANTHOMYIIDAE						
<i>Delia/Botanophila sp.</i>	49	1	16		112	1
<i>Emmesomyia socia</i>	2		21	1	9	
<i>Eutrichota praepotons</i>				1		
<i>Hylemya vagans</i>	7		30	1	6	2
<i>H.variata</i>	2			1	1	
<i>Pegoplata nitidicauda</i>			3		3	3
MUSCIDAE						
<i>Hydrotaea irritans</i>	11		16	2	222	1
<i>Polites lardarius</i>	9		6		19	2
<i>Phaonia angelicae</i>	2		3		12	1
<i>P.errans</i>	2	1	1		3	1
<i>P.valida</i>	10	3	6	4	19	13
<i>Helina depuncta</i>	7		17	3	24	2
<i>H.impunctata</i>	1		8	1	29	3
<i>Coenosia mollicula</i>		1	1		2	
FANNIDAE						
<i>Fannia sp.</i>	36		36	1	57	
CALLIPHORIDAE						
<i>Calliphora vicina</i>			2	1	1	
<i>Lucilia caesar</i>	1		2		10	1
SARCOPHAGIDAE						
<i>Sarcophaga carnaria</i>		1	2	3	6	7
<i>S. subvicina</i>					3	2
<i>S.variegata</i>		1			2	2
<i>Sarcophaga sp.</i>	3		4	1	40	3
All other Diptera	548		762		1513	
Grand total	1108		1282		2946	

Fig 2 All species marked in wood

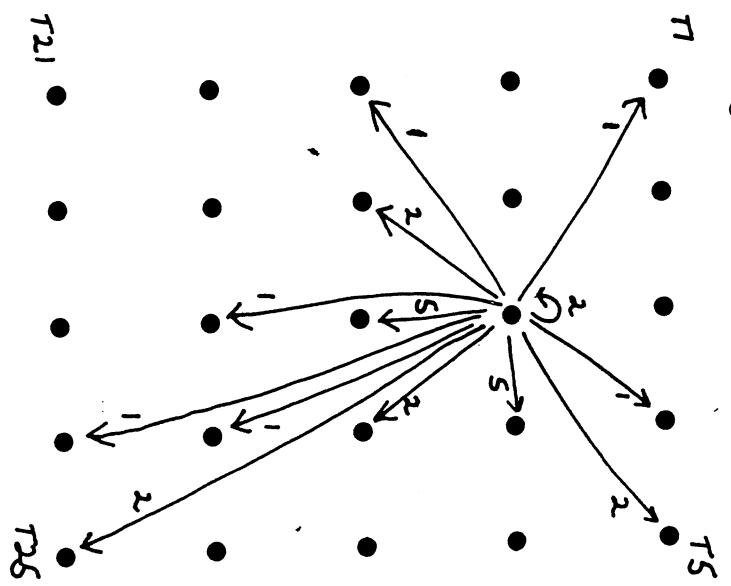


Fig 3 All species marked in edge

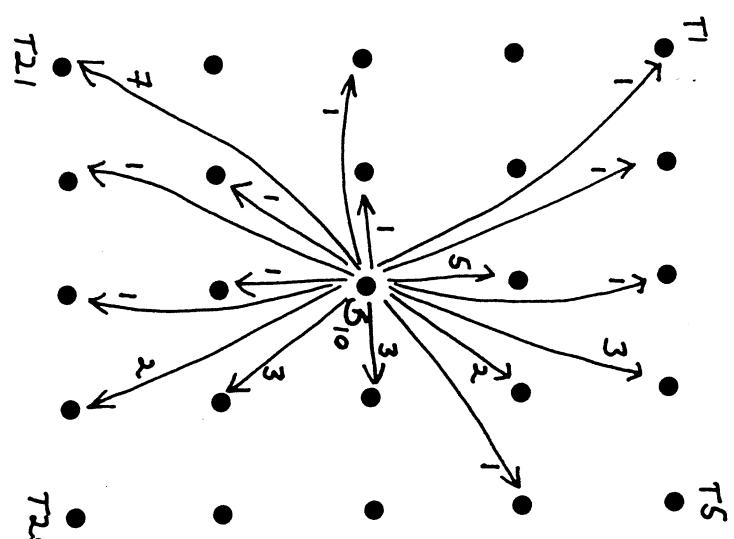


Fig 4 All species marked in field

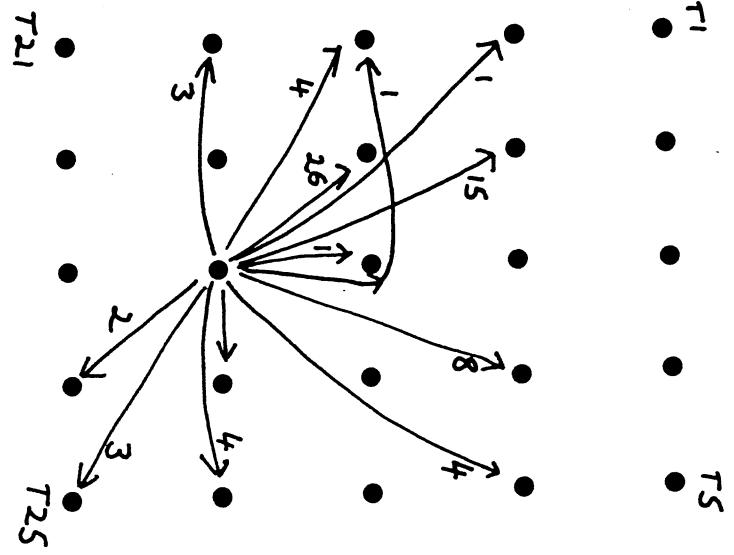


Fig 5 Wood marked Diptera

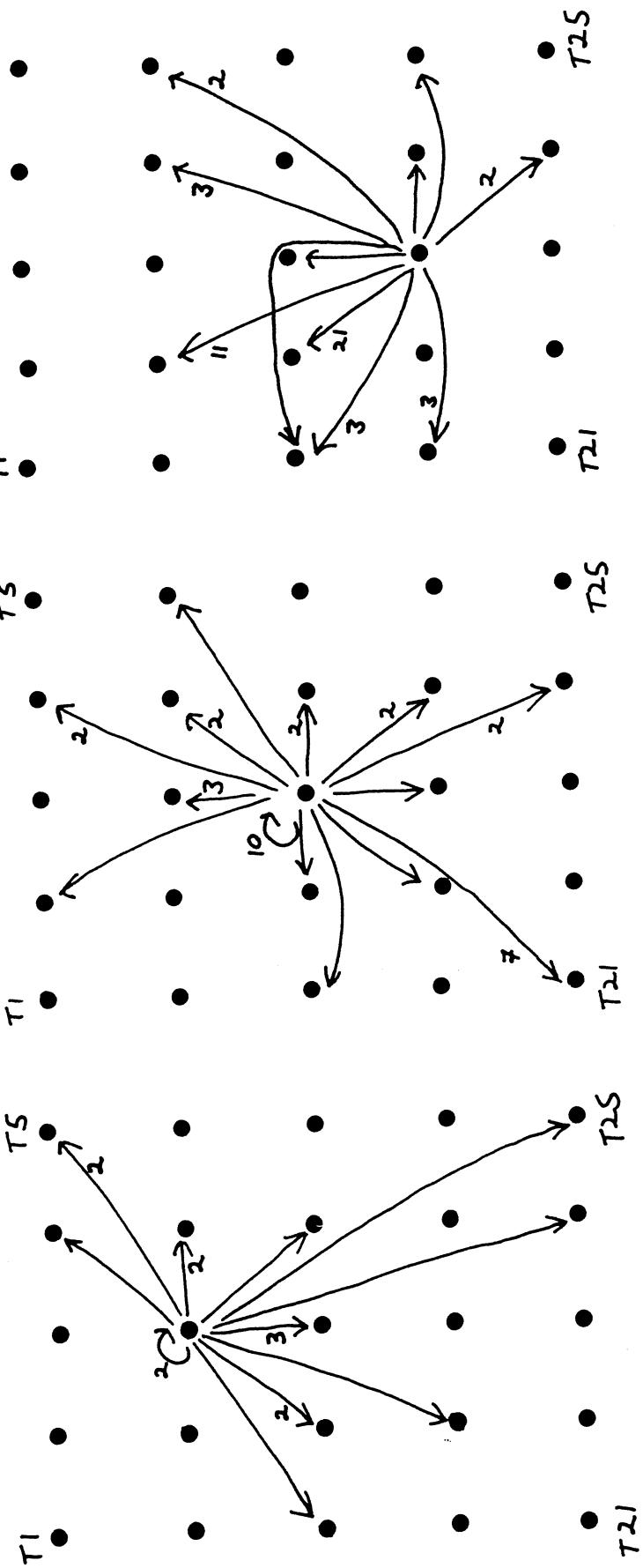


Fig 6 Edge marked Diptera

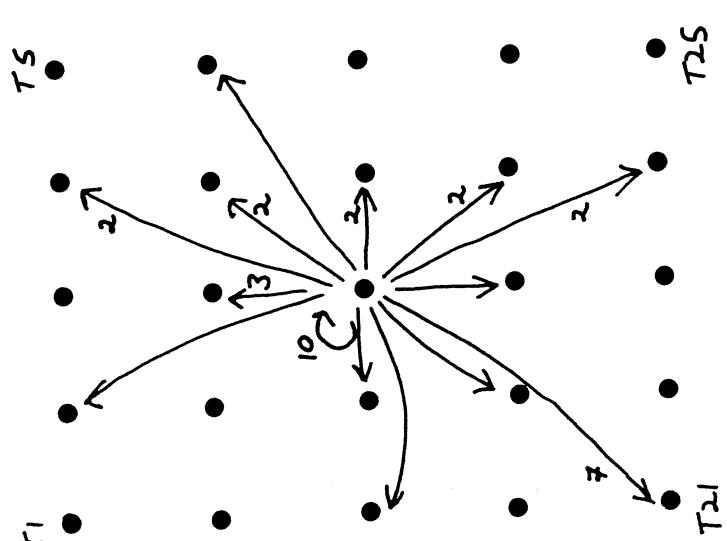
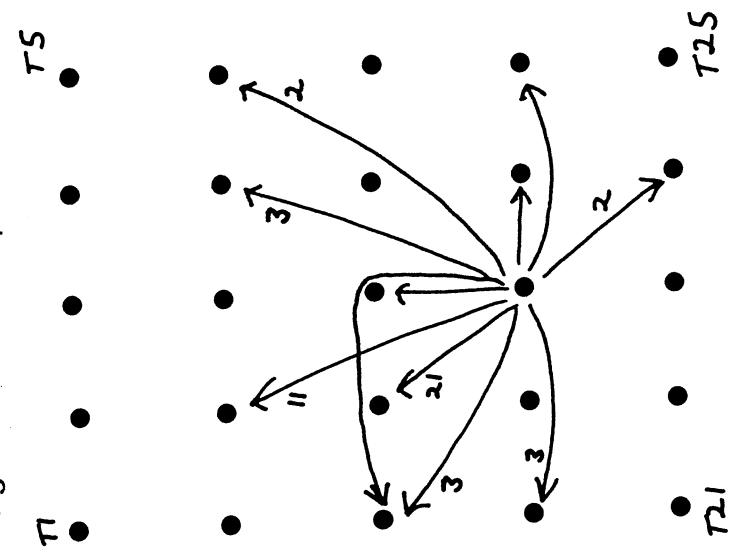


Fig 7 Field marked Diptera



assumptive estimate of recapture probability can be made by comparing the total volume of sampling traps with the volume of the area that the traps occupy. This method makes no assumptions about insect flight directions, step lengths and turn angles. Given that one single Malaise trap samples 1.8 m³ and the total woodland volume sampled was between 4800m³ (if traps define the corners of the grid) and 7500m³ (if the sampling area is considered to be the area covered by the grid and half the distance to the next trap). Thus the chance of any individual being recaptured with a grid of 25 traps is between 1 in 107 and 1 in 167 if all traps are equally likely to capture any insect and insects move in a random fashion. Thus the variable recapture numbers for the most numerous recaptured group, the Diptera, represent a good rate of recapture. Overall, Dipteran recapture rates were approximately 1 in 50. There may be variation between the recapture rates of individual species but for the majority of species sample numbers are too small to allow any statistical significance to be placed on recapture rate values, thus they are not given.

From the recapture data mobility maps for all species combined, and for the Diptera, Coleoptera, Hymenoptera and others are shown in Figures 2-7. The method can be used to detect non-random movements within this study site and differences in mobility between insects caught in woodland, edge and field locations. It can also be used to detect different mobility patterns of different species groups. For all insect species marked within the wood the majority of recaptures were within the wood or the wood edge, with few individuals moving into the field traps (Figure 2). Those that did were only captured in those traps nearest to the thick hedge at the southern boundary of the field. This data may be interpreted to suggest that such a feature may promote mobility. For insects originally marked within the wood margin (Trap 13) individuals were recaptured within the wood, the edge and the field, but of those moving into the field there was a strong directionality of movement, the majority moving westward (Figure 3). The largest number of movements detected were from the field trap (Trap no. 18). Most movements were to the wood edge and no recaptures were made within trap line 1-5, which was the furthest from the wood edge (Figure 4).

Because of recapture sample sizes only the Diptera samples warrant consideration of their mobility patterns (Figure 5-7). Since these constitute the bulk of the recaptured specimens the general pattern of mobility outlined above is the result of mobility of these organisms. The bulk of the detected movements are of *Phaonia valida* (Muscidae), and of members of the Sarcophagidae particularly of individuals originally marked in the field. Not all of the Diptera families presumed to have been marked (having been caught in Traps 8, 13 and 18) were recaptured (Table 2), and only subsets of the captured families were recaptured. movements of individuals of Diptera are shown in Table 3. Although the data must be approached with caution, if the recorded movements are truly representative there is some evidence for species specific movements between wood, edge and field locations and also for differences in the distances they moved between marking and recapture. For example most recaptures of *Episyphus balteatus* indicate that the majority of recaptured individuals move between field and edge habitats, that *Phaonia valida* is wide ranging but most recaptures were within wood and edge locations and *Sarcophaga carnaria* essentially restricted to field and edge locations. However, recapture data must be considered with the actual unmarked samples (see Appendix 3) if any interpretation of location specific data is to be made. In addition recapture data can be used to define individual movements but the probability of recapture in particular locations may be influenced by habitat specific resource availability and quality and movement

Table 3. The movement of Dipteron species between wood, edge and field locations.

SPECIES	No of individuals marked in wood recaptured in			No of individuals marked in edge recaptured in			No of individuals marked in field recaptured in		
	Wood	Edge	Field	Wood	Edge	Field	Wood	Edge	Field
TIPULIDAE									
<i>Tipula paludosa</i>						1		1	
KEROPLATIDAE									
<i>Neoplatyura modesta</i>					1		1		
MYCETOPHILIDAE									
<i>Acnemia nitidicollis</i>			1						
<i>Mycetophila fungorum</i>					1				
DOLICHOPODIDAE									
<i>Medetra abstrusa</i>	1	0	0						
<i>Medetra truncorum</i>								1	
<i>Medetra</i> sp.				1					1
PHORIDAE									
<i>Diplonevra concinna</i>	0	1	0						
<i>D.nitidula</i>				1			1		
<i>D.pilosella</i>						1			
<i>Diplonevra</i> sp.	1	0	0					1	
<i>Megaselia</i> sp.						1	4		
SYRPHIDAE									
<i>Episyphus balteatus</i>				2			1	1	
<i>Epeodes latifasciatus</i>	0	0	1						
<i>Sphaerophoria scripta</i>	0	0	1						
<i>Helophilus pendulus</i>	0	0	1						
DRYOMYZIDAE									
<i>Dryomyza analis</i>				1					
SCIOMYZIDAE									
<i>Coremacera marginata</i>	0	0	2						
HELEOMYZIDAE									
<i>Suillia affinis</i>					1				
<i>S.bicolor</i>					1				
<i>S.ustulata</i>	1	0	0						
<i>S.variegata</i>	0	1	0						
EPHYDRIIDAE									1
<i>Hydrellia</i> sp.									1
LIMNELLIA quadrata								1	
ANTHOMYIIDAE									
<i>Delia/Botanophila</i> sp.	0	1	0				1		
<i>Emmesomyia socia</i>						1			
<i>Eutrichota praepotons</i>				1					
<i>Hylemya vagans</i>					1		1	1	
<i>H.variata</i>					1				
<i>Pegoplata nitidicauda</i>							2	1	
MUSCIDAE									
<i>Hydrotaea irritans</i>					1	1	1		
<i>Polistes fardarius</i>								1	
<i>Phaonia angelicae</i>							1		
<i>P.errans</i>	1	0	0					1	
<i>P.valida</i>	4	0	1	2	3		6	7	1
<i>Helina depuncta</i>				2				1	1
<i>H.impunctata</i>						1	3		
<i>Coenosia mollicula</i>	0	0	1						
FANNIDAE					1				
<i>Fannia</i> sp.				1					
CALLIPHORIDAE									
<i>Calliphora vicina</i>						1			
<i>Lucilia caesar</i>							1		
SARCOPHAGIDAE									
<i>Sarcophaga carnaria</i>	0	0	1	1	1	3	2	4	1
<i>S. subvicina</i>							1		
<i>S.variegata</i>	1						2		
<i>Sarcophaga</i> sp.						1	1	1	1

Wood - Traps 1-10; Edge - Traps 11-15; Field - Traps 16-25.

itself. If movement is influenced by habitat type then there may be a higher probability of recapture in those areas which induce the greatest movement. If resources are scarce individuals may engage in more frequent and longer distance movements than in more favourable areas. Although they may remain in resource poor areas for shorter periods than in high quality areas they may be more likely to be captured in an interception trap. In addition the probability of an individual being recaptured will be influenced by the relationship between mean inter-trap distance and mean flight length. Recapture frequencies are likely to be greater where mean flight lengths are greater than mean trap distances. If flight distances are negatively correlated with resource availability then recapture probabilities will be biased towards resource poor areas because of an increasing tendency for individuals to more frequently engage in flights which are of greater distances than mean inter-trap distances.

Evaluation of method

The method piloted in this study has demonstrated:

1. The marking method is applicable to a range of insect species, and can be run in the field with minimal effort once Malaise traps are erected.
2. Running traps in parallel with marking traps will provide an indication of the quantity and composition of the marked species.
3. The detection of movement can be achieved by looking for retained fluorescent powders but this requires the use of a strong UV source in a dark room to detect traces of powder.
4. The method may be applicable to evaluating the role of habitat features in mobility and the initial pilot has shown that there are differences between the mobility of insects marked within woodland, woodland edge and field locations.
5. It is highly unlikely that large numbers of marked insects will be recaptured using this method. If the methods is taken up it is desirable to increase the number of marked insects to increase the chance of detecting movements and to increase the range of insects that are likely to be recaptured. One suggestion is to increase the number of marking traps or the size of marking traps to sample a larger volume of habitat at any given location. Alternatively more marking traps could be set out over any study site. There are about 20 different colours of fluorescent powder dyes produced by the source company used here (though the UV signal given off by the whole range has not been investigated). The possibility therefore remains to increase the range of site specific marks up to seven-fold in comparison with that used here.
6. The method is likely to be of use in addressing issues relating to overall patterns of mobility in relation to habitat heterogeneity and colonising ability. It will be of use in determining the distance to which non-woodland species move into woodland as part of their normal activity and thus be of use in determining how small woodland areas can be for them to retain a true woodland core.
7. The method may be useful in detecting occasional long distance movements between isolated habitat patches, but its use in such a situation would require thorough evaluation. No attempt has been made in this pilot to scale up the spatial scale over which the method can be applied.

APPENDIX 1

The number of trap specific recaptures for each resampling period, 9 August to 9 September 1994, Brasenose Wood Insect mobility pilot study.

BRASENOSE WOOD MARK-RECAPTURE TRIAL

SAMPLE COLLECTION DATE: 9TH AUG 1994

TRAP #	YELLOW			RECAPTURES			BLUE					
	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

BRASENOSSE WOOD MARK-RECAPTURE TRIAL

SAMPLE COLLECTION DATE: 12TH AUG 1994

TRAP #	YELLOW			RECAPTURES			BLUE					
	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

BRASENOSSE WOOD MARK RECAPTURE TRIAL

SAMPLE COLLECTION DATE: 16TH AUG 1994

TRAP	RECAPTURES																
	YELLOW			PINK	PINK			Others	BLUE			Others	BLUE			Others	
	Diptera	Hymenoptera	Coleoptera	Others													
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
missing																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	

BRASENOSE WOOD MARK RECAPTURE TRIAL

SAMPLE COLLECTION DATE: 18TH AUG 1994

TRAP	YELLOW			RECAPTURES			BLUE					
	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others
1					1							
2												
3												
4									1			
5	missing											
6												
7	3											
8												
9	2	2				1			2			1 Hemiptera
10	1											
11	1				1 Lepidoptera							
12	2											
13												
14												
15												
16												
17												
18												
19												1 Lepidoptera
20	1				1 Hem 2 Lep							
21						3						
22												
23												
24												
25	1				1 Lepidoptera							

BRASENOSSE WOOD MARK-RECAPTURE TRIAL

SAMPLE COLLECTION DATE: 23rd AUG 1994

TRAP	RECAPTURES											
	YELLOW			PINK								
Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others	
1												
2												
3												
4												
5												
6												
7	1		1									
8								2				
9								1				
10												
11	2											
12	2							1				
13								1				
14												
15												
16			1									
17												
18												
19												
20												
21												
22												
23									1			
24												
25												

BRASENOSE WOOD MARK-RECAPTURE TRIAL

SAMPLE COLLECTION DATE: 26TH AUG 1994

TRAP	YELLOW			RECAPTURES			BLUE					
	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others
1												
2												
3												
4												
5												
6												
7	1											
8												
9	3	1										
10	1	1										
11	1(& Pink)											
12	4											
13												
14												
15												
16												
17												
18												
19					2							
20												
21												
22												
23												
24												
25												

BRASENOSSE WOOD MARK RECAPTURE TRIAL

SAMPLE COLLECTION DATE: 30TH AUG 1994

TRAP	YELLOW			PINK			BLUE					
	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others
1												
2												
3					1							
4												
5												
6												
7				5								
8							1					
9												
10												
11												
12					3							
13					1 (& Pink)				1 Orthoptera			
14						2			1			
15							1					
16								1				
17												
18												
19												
20												
21												
22												
23												
24												
25												1

BRASENOSE WOOD MARK RECAPTURE TRIAL

SAMPLE COLLECTION DATE: 2nd SEPT 1994

TRAP	YELLOW				RECAPTURES				BLUE			
	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others
1												
2												
3												
4												
5												
6												
7												
8												
9				1								
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25				1								

BRASENOSE WOOD MARK-RECAPTURE TRAIL

SAMPLE COLLECTION DATE: 6TH SEPT 1994

TRAP	YELLOW			PINK			RECAPTURES			BLUE		
	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others
1												
2												
3												
4												
5												
6												
7			1									
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

BRASENOSE WOOD MARK-RECAPTURE TRIAL

SAMPLE COLLECTION DATE: 9TH SEPT 1994

TRAP	YELLOW				RECAPTURES				BLUE			
	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others	Diptera	Hymenoptera	Coleoptera	Others
1												
2												
3												
4												
5												
6												
7												
8												
9	1											
10												
11												
12	1											
13					1							
14												
15												
16												
17												
18												
19	missing											
20												
21												
22												
23												
24									1			
25												

APPENDIX 2

The number of Coleoptera species identified from Traps 8, 13, 18 and 5,7, 14, 19 and 21, from 9 August to 9 September 1994, Brasenose Wood Insect mobility pilot study. (As supplied by Alex Williams).

MARKED BEETLE NUMBERS -FROM ADJACENT TRAPS TO MARKING TRAPS

SPECIES	TRAP 8						TRAP 13						TRAP 18						Date								
	Date	9.8	16.8	18.8	23.8	30.8	2.9	6.9	9.9	9.8	12.8	18.8	23.8	26.8	6.9	9.9	9.8	12.8	16.8	18.8	23.8	26.8	30.8	2.9	6.9		
<i>Coccinella septempunctata</i>						1											1		2								
<i>Propylea quatuordecimpunctata</i>	12			1		1											3		4	1	2						
<i>Sitona lineatus</i>				1														1	1	1							
<i>S.hispidulus</i>																				2							
<i>Longitarsus luteus</i>	8	18	3	20	6		5	2	15	11	5	9	1	12	1	5	10	6	2	2	10	1					
<i>L.melanoccephalus</i>																				1							
<i>L.kutscherae</i>		1	1	1																							
<i>Aphthona euphorbinae</i>	20	40	25	8	16	5	30	6	35	78	25	5	11	44	7	10	28	19	8	8	4	32	1	4			
<i>A.herbigradus</i>																											2
<i>Oulema melanopa</i>																											
<i>Philanthus cognatus</i>																											
<i>P.varius</i>																											
<i>Chaetocnema hortensis</i>																											
<i>Rhynchosciara quercus</i>																											
<i>Atomaria lewisi</i>																											
<i>Phyllotreta undulata</i>																											
<i>Meligethes aeneus</i>																											
<i>M.nigrescens</i>																											
<i>Tachinus pallipes</i>																											
<i>Nargus velox</i>																											
<i>Protaetia fulvipes</i>																											
<i>Promophaagus sericatus</i>										2																	
<i>Trixagus carinifrons</i>																											
<i>Circulio nucum</i>																											
<i>Lordithon thoracicus</i>																											
<i>Trichapion simile</i>																											
<i>Mordellistena humerolis</i>																											
<i>Altica oleracea</i>																											
<i>Nicrophorus vespilloides</i>																											
<i>C.similata</i>																											
<i>Tachyporus hypnorum</i>																											
<i>Balanobius salicivorus</i>																											
<i>Brachyporus glaber</i>																											
<i>Xantholinus linearis</i>																											
<i>Catops coracinus</i>																											
<i>Aspidophorus orbiculatus</i>																											

SPECIES	TRAP 5							TRAP 7							TRAP 14															
	Date	9.8	12.8	16.8	23.8	26.8	30.8	2.9	6.9	9.9	9.8	12.8	16.8	18.8	23.8	26.8	2.9	6.9	9.9	9.8	12.8	16.8	18.8	23.8	26.8	30.8	4.9	2.9	6.9	
<i>Coccinella septempunctata</i>																														
<i>Propylea quatuordecimpunctata</i>	2	2	1		2						4	2	1															1		
<i>Sitona lineatus</i>																														
<i>S. hispidulus</i>																														
<i>Longitarsus Juridus</i>	15	70	60	25	2	7	1	35	6	8	3	27	30	7	9	1	16	5	1	8	3	3	4	2						
<i>L. melanoccephalus</i>																			2											
<i>L. kutscherae</i>																			1											
<i>Apionoma euphorbinae</i>	25	110	50	15	9	8	6	15	5	14	30	17	20	15	9	6	20	8	15	8	52	30	10	4	7	3	7	10		
<i>A. herbigradus</i>																														
<i>Oulema melanopa</i>																														
<i>Philanthis cognatus</i>																														
<i>P. varius</i>																														
<i>Chaetocnema hortensis</i>																			1											
<i>Rhynchosciara quercus</i>																														
<i>Atomaria lewisi</i>																														
<i>Phyllotreta undulata</i>																														
<i>Meigenethes aeneus</i>																			3	1	1									
<i>M. nigrescens</i>																														
<i>Trichinus pallipes</i>																														
<i>Nargus velox</i>																														
<i>Protapion fulvipes</i>																														
<i>Ptomaphagus sericatus</i>																														
<i>Trixagus canariensis</i>																														
<i>Circulio nucum</i>																														
<i>Lordithon thoracicus</i>																														
<i>Trichapion simile</i>																														
<i>Mordellistena humerolis</i>																														
<i>Attica oleracea</i>																														
<i>Nicrophorus vespilloides</i>																														
<i>Corticaria gibbosa</i>																														
<i>C. similata</i>																														
<i>Tachyporus hypnorum</i>																														
<i>Balanobius salicivorus</i>																														
<i>Brachypterous glaber</i>																														
<i>Xantholinus linearis</i>																														
<i>Catops coracinus</i>																														
<i>Aspidiphorus orbiculatus</i>																														

SPECIES	TRAP 19						TRAP 21											
	Date	2.9	9.8	16.8	12.8	18.8	23.8	26.8	2.9	6.9	9.8	12.8	16.8	18.8	23.8	26.8	30.8	9.9
<i>Coccinella septempunctata</i>		3	1						1		2	1	2	2	2	2		
<i>Propylea quatuordecimpunctata</i>		3		1				1			4	1	2	2	5	1	1	1
<i>Sitona lineatus</i>		2					5	1	2	1	1	1	1	1	1			
<i>S. hispidulus</i>																		
<i>Longitarsus luridus</i>		2	5	1			2	5		2		2	2	2	6	1		
<i>L. melanocephalus</i>																		
<i>L. kutscherae</i>																		
<i>Aphthona euphorbinae</i>	10	5		30	4	1	2	1	2	1	1	1	1	1	2	2	2	2
<i>A. herbigradis</i>				8														
<i>Oulema melanopa</i>						1												
<i>Philanthus cognatus</i>						3												
<i>P. varius</i>																		
<i>Chaetocnema hortensis</i>																		
<i>Rhynchosciara quercus</i>																		
<i>Atomaria lewisi</i>																		
<i>Phyllotreta undulata</i>							1	1						1				
<i>Meigenites aeneus</i>							6	2	2	2			5	1	2	1		
<i>M. nigrescens</i>							2	4					3					
<i>Tachinus pallipes</i>																		
<i>Nargus velox</i>																		
<i>Protapion fulvipes</i>																		
<i>Promophaeus sericatus</i>								1										
<i>Trixagus carinifrons</i>																		
<i>Circulio nucum</i>																		
<i>Lordithon thoracicus</i>																		
<i>Trichapion simile</i>																		
<i>Mordellistena humerolis</i>																		
<i>Altica olereacea</i>																		
<i>Nicrophorus vespilloides</i>																		
<i>Corticicara gibbosa</i>															1			
<i>C. similata</i>																1		
<i>Tachyporus hyalinus</i>																		
<i>Balanobius salicivorus</i>								1										
<i>Brachypterous glaber</i>																		
<i>Xantholinus linearis</i>																		
<i>Calops coracinus</i>																		
<i>Aspidophorus orbiculatus</i>																		

APPENDIX 3

Complete species list of Dipteran species caught in Traps 8, 13 and 18, together with recaptures, from 9 August to 9 September 1994, Brasenose Wood Insect mobility pilot study. (As supplied by Peter Chandler).



IDENTIFICATION OF DIPTERA FROM THE INSECT MOBILITY PILOT STUDY

Summary

Diptera were identified from this study which was to investigate how far insects move across a woodland-meadow boundary. The material examined was collected by a grid of 25 Malaise traps set up in 5 rows, 2 within a wood, 1 along the boundary and 2 within the field. Three additional traps placed in these three locations were fitted with devices that automatically dusted insects escaping, using fluorescent dyes of three different colours (pink, yellow and blue) to identify their origin.

The recaptured specimens were received in 66 tubes, labelled according to the trap number, date of emptying and dye colour. All recaptured Diptera from all ten trapping occasions were identified as far as practicable. These are listed under the details stated on the tubes in order of date and trap number. The 15 families recaptured are listed in order of abundance of specimens and species and a full list of the 42 taxa recognised is given.

All Diptera in 29 Malaise trap samples received were identified as far as practicable. These were from Traps 8, 13 and 18 and were labelled with the date of emptying. The traps had been emptied on ten occasions, but the 16th August samples from Traps 13 and 18 were absent as was the 9th September sample from Trap 18. The large 9th August sample from Trap 18 was received in two tubes as was the smaller 9th September sample from Trap 13.

The samples were thus as follows:

	Trap 8	Trap 13	Trap 18
9th August	1	1	2
12th August	1	1	1
16th August	1	-	-
18th August	1	1	1
23rd August	1	1	1
26th August	1	1	1
30th August	1	1	1
2nd September	1	1	1
6th September	1	1	1
9th September	1	2	-

A full check list was compiled for all species identified, a little over 360 species being recognised, 345 of them identified to specific level. Four of the recaptured species were not otherwise found in any of the samples. Lists are also provided of all species present in each of the three traps, and for each of the 29 samples. The contents of the two tubes for the 9th August sample from Trap 18 and 9th September sample from Trap 13 samples are listed separately.

Peter Chandler

LIST OF RECAPTURED DIPTERA FROM ALL TRAPS

Tubes are listed in order of date.

Trap Numbers are given in bold for Traps 1-25

9.8 12 1 blue	<i>Diplonevra concinna</i> (Meigen) 1♂
9.8 19 1 yellow	<i>Phaonia valida</i> (Harris) 1♀
16.8 2 7 yellow	<i>Phaonia valida</i> (Harris) 2♀ <i>Sarcophaga carnaria</i> (Linnaeus) 1♂ <i>S. subvicina</i> Rohdendorf 1♂ <i>Sarcophaga</i> species 1♀ <i>Diplonevra</i> species 1♀ <i>Neoplatyura modesta</i> (Winnertz) 1♂
16.8 4 2 pink	<i>Episyrphus balteatus</i> (De Geer) 1♂ <i>Fannia</i> species 1♀
16.8 5 2 blue	<i>Phaonia valida</i> (Harris) 2♂
16.8 7 2 yellow	<i>Phaonia valida</i> (Harris) 1♂ <i>P. errans</i> (Meigen) 1♀
16.8 10 1 yellow	<i>Phaonia valida</i> (Harris) 1♂
16.8 12 1 blue	<i>Suillia variegata</i> (Loew) 1♀
16.8 14 1 blue	<i>Delia/Botanophila</i> species 1♀
16.8 17 1 yellow	<i>Sarcophaga subvicina</i> Rohdendorf 1♂
16.8 21 4 blue	<i>Sarcophaga carnaria</i> (Linnaeus) 1♂ <i>Coenosia mollicula</i> (Fallén) 1♂ <i>Sphaerophoria scripta</i> (Linnaeus) 1♂ <i>Coremacera marginata</i> (Fabricius) 1♂
16.8 24 2 yellow	<i>Sarcophaga carnaria</i> (Linnaeus) 1♂ <i>Helina depuncta</i> (Fallén) 1♀
16.8 25 1 blue	<i>Epeodes latifasciatus</i> (Macquart) 1♀
18.8 2 1 pink	<i>Acnemia nitidicollis</i> (Meigen) 1♂
18.8 7 3 yellow	<i>Phaonia valida</i> (Harris) 1♀ <i>Hydrotaea irritans</i> (Fallén) 1♀ <i>Pegoplata nitidicauda</i> (Schnabl) 1♀
18.8 9 2 blue	<i>Phaonia errans</i> (Meigen) 1♂ <i>Suillia ustulata</i> (Meigen) 1♀
18.8 9 2 yellow	<i>Megaselia</i> species 2♀

18.8 10 1 pink	<i>Phaonia valida</i> (Harris) 1♀
18.8 10 1 yellow	<i>Episyphus balteatus</i> (De Geer) 1♀
18.8 11 1 yellow	<i>Medetera truncorum</i> Meigen 1♂
18.8 12 2 yellow	<i>Sarcophaga carnaria</i> (Linnaeus) 1♂ <i>Episyphus balteatus</i> (De Geer) 1♀
18.8 20 1 yellow	<i>Hydrellia</i> species 1♀
18.8 21 3 pink	<i>Calliphora vicina</i> Robineau-Desvoidy 1♀ <i>Emmesomyia socia</i> (Fallén) 1♀ <i>Sarcophaga</i> species 1♀ <i>Megaselia</i> species 1♀
18.8 24 1 blue	<i>Phaonia valida</i> (Harris) 1♀
18.8 25 1 yellow	<i>Sarcophaga</i> species 1♀
23.8 7 1 yellow	<i>Sarcophaga variegata</i> (Scopoli) 1♂
23.8 8 2 pink	<i>Episyphus balteatus</i> (De Geer) 1♂ <i>Medetera</i> species 1♀ (poor condition)
23.8 8 2 blue	<i>Medetera abstrusa</i> Thuneberg 1♀ <i>Diplonevra</i> species 1♀
23.8 9 1 pink	<i>Phaonia valida</i> (Harris) 1♀
23.8 11 2 yellow	<i>Phaonia valida</i> (Harris) 1♀ <i>Polites lardarius</i> (Fabricius) 1♂
23.8 12 2 yellow	<i>Phaonia valida</i> (Harris) 2♂
23.8 13 1 pink	<i>Suillia affinis</i> (Meigen) 1♀
23.8 16 1 yellow	<i>Medetera truncorum</i> Meigen 1♂
23.8 23 1 pink	<i>Tipula paludosa</i> Meigen 1♀
26.8 7 1 yellow	<i>Hylemya vagans</i> (Panzer) 1♀
26.8 8 1 pink	<i>Dryomyza analis</i> (Fallén) 1♂
26.8 9 3 yellow	<i>Diplonevra nitidula</i> (Meigen) 1♂ <i>Megaselia</i> species 1♀ <i>Pegoplata nitidicauda</i> (Schnabl) 1♀
26.8 9 1 pink	<i>Diplonevra nitidula</i> (Meigen) 1♂
26.8 10 1 yellow	<i>Delia/Botanophila</i> species 1♀
26.8 11 1 yellow/ pink	<i>Sarcophaga carnaria</i> (Linnaeus) 1♂

26.8 12 4 yellow	<i>Phaonia valida</i> (Harris) 1♀ <i>Sarcophaga</i> species 1♀ <i>Hylemya vagans</i> (Panzer) 1♀ <i>Pegoplata nitidicauda</i> (Schnabl) 1♀
26.8 13 1 pink	<i>Helina depuncta</i> (Fallén) 1♀
26.8 19 2 pink	<i>Sarcophaga carnaria</i> (Linnaeus) 2♂
30.8 3 1 pink	<i>Sarcophaga carnaria</i> (Linnaeus) 1♂
30.8 7 5 yellow	<i>Sarcophaga variegata</i> (Scopoli) 1♂ <i>Lucilia caesar</i> (Linnaeus) 1♂ <i>Helina impuncta</i> (Fallén) 2♀ <i>Megaselia</i> species 1♂
30.8 7 1 yellow/blue	<i>Phaonia valida</i> (Harris) 1♀
30.8 12 3 yellow	<i>Sarcophaga carnaria</i> (Linnaeus) 2♂ <i>Phaonia valida</i> (Harris) 1♀
30.8 13 1 yellow	<i>Helina depuncta</i> (Fallén) 1♀
30.8 13 2 pink	<i>Hydrotaea irritans</i> (Fallén) 1♀ <i>Hylemya variata</i> (Fallén) 1♂
30.8 14 1 pink	<i>Phaonia valida</i> (Harris) 1♀
30.8 16 1 yellow	<i>Limnellia quadrata</i> (Fallén) 1♂
30.8 24 1 blue	<i>Coremacera marginata</i> (Fabricius) 1♀
2.9 13 2 pink	<i>Hylemya vagans</i> (Panzer) 1♀ <i>Suillia bicolor</i> (Zetterstedt) 1♂
2.9 24 1 pink	<i>Hydrotaea irritans</i> (Fallén) 1♀
6.9 7 1 yellow	<i>Phaonia angelicae</i> (Scopoli) 1♀
6.9 8 1 pink	<i>Eutrichota praepotens</i> (Wiedemann) 1♀
6.9 12 1 blue	<i>Helophilus pendulus</i> (Linnaeus) 1♀
6.9 12 1 pink	<i>Mycetophila fungorum</i> (De Geer) group 1♀
6.9 12 3 yellow	<i>Phaonia valida</i> (Harris) 2♀ <i>Tipula paludosa</i> Meigen 1♀
6.9 13 2 pink	<i>Helina depuncta</i> (Fallén) 1♀ <i>Neoplatyura modesta</i> (Winnertz) 1♂
6.9 14 1 pink	<i>Phaonia valida</i> (Harris) 1♀
6.9 17 1 pink	<i>Diplonevra pilosella</i> Schmitz 1♂

9.9 9 1 yellow	<i>Helina impuncta</i> (Fallén) 1♀
9.9 12 1 yellow	<i>Sarcophaga carnaria</i> (Linnaeus) 1♂
9.9 13 1 pink	<i>Helina depuncta</i> (Fallén) 1♀
9.9 24 1 pink	<i>Helina impuncta</i> (Fallén) 1♀

The following species were among the recaptured specimens but not in any of the other samples examined:

Coremacera marginata (Fabricius) (Sciomyzidae)

Suillia ustulata (Meigen) (Heleomyzidae)

Hydrellia species (female not determined) (Ephydriidae)

Eutrichota (= *Pegomyza*) *praepotens* (Wiedemann) (Anthomyiidae)

There was also a male of *Sphaerophoria scripta* (Linnaeus); only females possibly belonging to this species were found in the other samples.

The 108 recaptured specimens belonged to 15 families as follows:

Muscidae	38 specimens of 8 species
Sarcophagidae	19 specimens of 3 species
Anthomyiidae	11 specimens of 6 species
Phoridae	11 specimens (6 of 3 <i>Diplonevra</i> species and 5 of undetermined <i>Megaselia</i> species)
Syrphidae	7 specimens of 4 species
Heleomyzidae	4 specimens of 4 species
Dolichopodidae	4 specimens of 2 species
Calliphoridae	2 specimens of 2 species
Ephydriidae	2 specimens of 2 species
Mycetophilidae	2 specimens of 2 species
Keroplatidae	2 specimens of 1 species
Sciomyzidae	2 specimens of 1 species
Tipulidae	2 specimens of 1 species
Dryomyzidae	1 specimen of 1 species
Fanniidae	1 specimen of 1 species

Systematic List of Species Recaptured

(37 species determined specifically, at least 5 other species determined to genus only)

Tipulidae *Tipula paludosa* Meigen

Keroplatidae *Neoplatyura modesta* (Winnertz)

Mycetophilidae *Acnemia nitidicollis* (Meigen)
Mycetophila fungorum (De Geer) group ♀ (the male of *M. fungorum* was found
in Trap 8)

Dolichopodidae	<i>Medetera abstrusa</i> Thuneberg <i>M. truncorum</i> Meigen
Phoridae	<i>Diplonevra concinna</i> (Meigen) <i>D. nitidula</i> (Meigen) <i>D. pilosella</i> Schmitz <i>Megaselia</i> species
Syrphidae	<i>Episyphus balteatus</i> (De Geer) <i>Epeodes latifasciatus</i> (Macquart) <i>Sphaerophoria scripta</i> (Linnaeus) <i>Helophilus pendulus</i> (Linnaeus)
Dryomyzidae	<i>Dryomyza analis</i> (Fallén)
Sciomyzidae	<i>Coremacera marginata</i> (Fabricius)
Heleomyzidae	<i>Suillia affinis</i> (Meigen) <i>S. bicolor</i> (Zetterstedt) <i>S. ustulata</i> (Meigen) <i>S. variegata</i> (Loew)
Ephydriidae	<i>Hydrellia</i> species (undetermined female) <i>Limnella quadrata</i> (Fallén)
Anthomyiidae	<i>Botanophila</i> or <i>Delia</i> females (not determined) <i>Emmesomyia socia</i> (Fallén) <i>Eutrichota praepotens</i> (Wiedemann) <i>Hylemya vagans</i> (Panzer) <i>H. variata</i> (Fallén) <i>Pegoplata nitidicauda</i> (Schnabl)
Muscidae	<i>Hydrotaea irritans</i> (Fallén) <i>Polietes lardarius</i> (Fabricius) <i>Phaonia angelicae</i> (Scopoli) <i>P. errans</i> (Meigen) <i>P. valida</i> (Harris) <i>Helina depuncta</i> (Fallén) <i>H. impuncta</i> (Fallén) <i>Coenosia mollicula</i> (Fallén)
Fanniidae	<i>Fannia</i> (undetermined female)
Calliphoridae	<i>Calliphora vicina</i> Robineau-Desvoidy <i>Lucilia caesar</i> (Linnaeus)
Sarcophagidae	<i>Sarcophaga carnaria</i> (Linnaeus) (= var. <i>vulgaris</i> Rohdendorf of van Emden) <i>S. subvicina</i> Rohdendorf <i>S. variegata</i> (Scopoli) (= typical <i>carnaria</i> of van Emden) <i>Sarcophaga</i> females (all of above 3 species, cannot be determined)

CHECK LIST OF ALL SPECIES OF DIPTERA PRESENT IN SAMPLES

Tipulidae

<i>Tipula oleracea</i> Linnaeus		18
<i>T. paludosa</i> Meigen	8	18

Limoniidae

<i>Symplecta stictica</i> (Meigen)		18
<i>Illisia maculata</i> (Meigen)	8	
<i>Molophilus appendiculatus</i> (Staeger)		13
<i>Dicranomyia mitis</i> (Meigen) (form <i>lutea</i>)		18
<i>Limonia nubeculosa</i> Meigen		13
<i>Neolimonia dumetorum</i> (Meigen)	8	18
<i>Rhipidia maculata</i> Meigen (= <i>duplicata</i> auctt.)	8	13
		18

Anisopodidae

<i>Sylvicola cinctus</i> (Fabricius)	8	
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Psychodidae

In small numbers (not determined)	8	13	18
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Culicidae

<i>Culex pipiens</i> Linnaeus		18
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Chironomidae

A few specimens (not determined)	8	13	18
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Ceratopogonidae

<i>Forcipomyia</i> species (not determined)	8		18
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Bibionidae

<i>Dilophus febrilis</i> (Linnaeus)		13	18
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Scatopsidae

<i>Swammerdamella brevicornis</i> (Meigen)		18
<i>Colobostema triste</i> (Zetterstedt)		18

Keroplatidae

<i>Macrocerata anglica</i> Edwards		18
<i>M. stigmoides</i> Edwards	13	
<i>Neoplatyura modesta</i> (Winnertz)	8	13
<i>N. nigricauda</i> (Strobl)	8	18

Mycetophilidae

<i>Monoclona rufilatera</i> (Walker)	8	13	18
<i>Acnemia nitidicollis</i> (Meigen)	8	13	18
<i>Megalopelma nigroclavatum</i> (Strobl)	8		
<i>Sciophila</i> species (undetermined female)			18
<i>Boletina</i> species (female of <i>sciarina</i> group)	8		
<i>Synapha vitripennis</i> (Meigen)	8	13	
<i>Apolephthisa subincana</i> (Curtis)	8	13	
<i>Rondaniella dimidiata</i> (Meigen)			13
<i>Leia bimaculata</i> (Meigen)	8		
<i>L. cylindrica</i> (Winnertz)			18
<i>Tetragoneura sylvatica</i> (Curtis)	8		
<i>Ectrepesthoneura colyeri</i> Chandler	8		
<i>Docosia fumosa</i> Edwards			18
<i>Cordyla crassicornis</i> Meigen	8		18
<i>C. murina</i> Winnertz Group species B	8		
<i>Brevicornu boreale</i> (Lundström)	8		18
<i>B. fissicauda</i> (Lundström)			18
<i>B. sericoma</i> (Meigen)	8		
<i>Exechia</i> species (female of <i>repanda</i> group)			18
<i>Trichonta terminalis</i> (Walker)			18
<i>T. vitta</i> (Meigen)		13	
<i>Phronia conformis</i> (Walker)			18
<i>Mycetophila britannica</i> Laštovka & Kidd	8		
<i>M. cingulum</i> Meigen			18
<i>M. fungorum</i> (De Geer)	8		
<i>M. gibbula</i> Edwards			18
<i>M. trinotata</i> Staeger	8		
<i>Zygomyia humeralis</i> (Wiedemann)		13	
<i>Z. notata</i> (Stannius)		13	18
<i>Z. pictipennis</i> (Staeger)		13	18
<i>Sceptonia cryptocauda</i> Chandler			18
<i>S. membranacea</i> Edwards		13	18
<i>S. nigra</i> (Meigen)	8		18
<i>S. tenuis</i> Edwards		13	
<i>Platurocypta punctum</i> (Stannius)		13	
<i>P. testata</i> (Edwards)	8	13	

Sciaridae

<i>Trichosia (T.) caudata</i> (Walker)	8		18
<i>T. (T.) splendens</i> Winnertz	8	13	
<i>T. (Leptosciarella) glabra</i> (Meigen)		13	
<i>T. (L.) pilosa</i> (Staeger)		13	18
<i>Schwenkfeldina carbonaria</i> (Meigen)			18
<i>Plastosciara brachyptera</i> (Kieffer)			18
<i>Phytosciara flavipes</i> (Meigen)	8	13	18
undetermined Sciaridae	8	13	18

Cecidomyiidae

In low numbers (not determined)	8	13	18
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Stratiomyidae

<i>Chorisops nagatomii</i> Rozkošny	13	18
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Rhagionidae

<i>Rhagio lineolus</i> Fabricius	13
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Asilidae

<i>Dioctria linearis</i> (Fabricius)	13	18
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Hybotidae

<i>Trichinomyia flavipes</i> (Meigen)	8	
<i>Leptopeza flavipes</i> (Meigen)		18
<i>Hybos culiciformis</i> (Fabricius)	8	13
<i>Platypalpus annulipes</i> (Meigen)		18
<i>P. longicornis</i> (Meigen)	8	18
<i>P. longiseta</i> (Zetterstedt)		18
<i>P. luteus</i> (Meigen)		18
<i>P. optimus</i> (Collin)		18
<i>P. pallipes</i> (Fallén)		18
<i>P. pectoralis</i> (Fallén)	8	13
<i>Tachypeza nubila</i> (Meigen)	8	13
<i>Tachydromia aemula</i> (Loew)	8	18
<i>Drapetis</i> (D.) <i>assimilis</i> (Fallén)		18
<i>D. parilis</i> Collin	8	13
<i>D. pusilla</i> Loew		18
<i>D. (Elaphropeza) ephippiata</i> (Fallén)	8	13
<i>Crossopalpus minimus</i> (Meigen)		18
		13

Empididae

<i>Empis livida</i> Linnaeus	8	13
<i>Rhamphomyia erythrophthalma</i> Meigen		18
(and its form <i>hirsutipes</i> Collin)		13
<i>Phyllodromia melanocephala</i> (Fabricius)	8	
<i>Trichopeza longicornis</i> (Meigen)		18

Dolichopodidae

<i>Rhaphium appendiculatum</i> (Zetterstedt)	8	
<i>Anepsiomyia flaviventris</i> (Meigen)		18
<i>Chrysotimus concinnus</i> (Zetterstedt)	8	13
<i>Sympycnus aeneicoxa</i> (Meigen)		18
<i>Syntormon pallipes</i> (Fabricius)	8	
<i>Bathycranium bicolorellum</i> (Zetterstedt)		13
<i>Systemus scholtzii</i> (Loew)		18
<i>Campsicnemus curvipes</i> (Fallén)	8	13
<i>Argyra argentina</i> (Meigen)	8	13
<i>A. confinis</i> (Zetterstedt)		18
<i>A. leucocephala</i> (Meigen)		13
<i>Chrysotus</i> species (females of <i>gramineus</i> group)	8	18
<i>Dolichopus festivus</i> Haliday	8	

<i>D.</i>	<i>griseipennis</i> Stannius	8	13	18
<i>D.</i>	<i>longicornis</i> Stannius	8		
<i>D.</i>	<i>plumipes</i> (Scopoli)			18
<i>D.</i>	<i>trivialis</i> Haliday			18
<i>D.</i>	<i>wahlbergi</i> Zetterstedt	8	13	18
<i>Medetera</i>	<i>abstrusa</i> Thuneberg	8	13	18
<i>M.</i>	<i>impigra</i> (Fallén)	8		18
<i>M.</i>	<i>acula</i> (Fallén)			18
<i>M.</i>	<i>pallipes</i> (Zetterstedt)	8		18
<i>M.</i>	<i>truncorum</i> Meigen	8	13	18

Lonchopteridae

<i>Lonchoptera lutea</i> Panzer	8		18
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Phoridae

<i>Anevrina thoracica</i> (Meigen)	8		
<i>Borophaga incrassata</i> (Meigen)	8	13	18
<i>Chaetopleurophora erythronota</i> (Strobl)	8		
<i>Conicera floricola</i> Schmitz	8	13	18
<i>C. similis</i> (Haliday)		13	18
<i>Diplonevra concinna</i> (Meigen)	8	13	18
<i>D. florea</i> (Fabricius)			18
<i>D. funebris</i> (Meigen)			18
<i>D. nitidula</i> (Meigen)	8	13	18
<i>D. pilosella</i> Schmitz	8	13	18
<i>Gymnophora arcuata</i> (Meigen)	8	13	
<i>Megaselia</i> species (not determined)	8	13	18
<i>Metopina galeata</i> (Haliday)	8	13	18
<i>M. heselhausi</i> Schmitz	8		18
<i>M. oligoneura</i> (Mik)			18
<i>Phalacrotophora fasciata</i> (Fallén)		13	18
<i>Phora atra</i> (Meigen)	8	13	18
<i>P. edentata</i> Schmitz	8		
<i>P. holosericea</i> Schmitz			18
<i>Pseudacteon formicarum</i> (Verrall)		13	18
<i>Spiniphora bergenstammi</i> (Mik)	8	13	18
<i>Triphleba distinguenda</i> (Strobl)		13	18
<i>T. nudipalpis</i> (Becker)	8	13	18

Pipunculidae

<i>Chalarus</i> species (not determined)	8	13	18
<i>Cephalops obtusinervis</i> (Zetterstedt)			18
<i>C. semifumosus</i> (Kowarz)	8	13	18
<i>C. ultimus</i> (Becker)			18
<i>Eudorylas subfascipes</i> Collin		13	18
<i>Tomosvaryella kuthyi</i> (Aczél)			18

Syrphidae

<i>Syrphus ribesii</i> (Linnaeus)		18	
<i>S. vitripennis</i> Meigen	8		

<i>Episyphus balteatus</i> (De Geer)	8	13	18
<i>Epeodes corollae</i> (Fabricius)			18
<i>E. latifasciatus</i> (Macquart)			18
<i>Sphaerophoria scripta</i> (Linnaeus)			sp. ♀ in 18
<i>Baccha elongata</i> (Fabricius) sensu lato		13	18
<i>Melanostoma mellinum</i> (Linnaeus)	8		18
<i>M. scalare</i> (Fabricius)	8	13	18
<i>Platycheirus albimanus</i> (Fabricius)	8		18
<i>P. peltatus</i> (Meigen)			18
<i>P. scutatus</i> (Meigen)			18
<i>Cheilosia intonsa</i> Loew	8		18
<i>C. pagana</i> (Meigen)	8		18
<i>Rhingia campestris</i> Meigen	8		
<i>Ferdinandea cuprea</i> (Scopoli)	8		
<i>Eumerus strigatus</i> (Fallén)			18
<i>Eristalis arbustorum</i> (Linnaeus)			18
<i>E. pertinax</i> (Scopoli)			18
<i>Helophilus pendulus</i> (Linnaeus)		13	18

Tephritidae

<i>Myoleja caesio</i> (Harris)			18
<i>Phagocarpus purmundus</i> (Harris)			18
<i>Tephritis formosa</i> (Loew)			18

Pallopteridae

<i>Palloptera modesta</i> (Meigen) (= <i>parallela</i> Loew)			18
<i>P. umbellatarum</i> (Fabricius)			18
<i>P. ustulata</i> Fallén	8	13	18

Dryomyzidae

<i>Dryomyza analis</i> (Fallén) (= <i>anilis</i> auctt.)	8	13	18
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Sciomyzidae

<i>Coremacera marginata</i> (Fabricius) (= <i>tristis</i> Harris)			
<i>Tetanocera hyalipennis</i> von Roser	8		
<i>Trypetoptera punctulata</i> (Scopoli)	8	13	18

Lauxaniidae

<i>Minettia rivosa</i> (Meigen)			18
<i>Sapromyza hyalinata</i> (Meigen)	8		
<i>S. sexpunctata</i> Meigen	8	13	18
<i>S. sordida</i> Haliday		13	
<i>Tricholauxania praeusta</i> (Fallén)	8	13	18
<i>Aulogastromyia anisodactyla</i> (Loew)	8		
<i>Lyciella decempunctata</i> (Fallén)	8	13	
<i>L. pallidiventris</i> group females	8		
<i>L. rorida</i> (Fallén)	8	13	18
<i>L. subfasciata</i> (Zetterstedt)	8		18
<i>Calliopum aeneum</i> (Fallén)			18

Psilidae

<i>Chyliza leptogaster</i> (Panzer) (= <i>scutellata</i> (Fabricius))		13
<i>Loxocera albiseta</i> (Schrank)	8	
<i>Psilosoma</i> (= <i>Camptopsila</i>) <i>lefebvrei</i> (Zetterstedt)	8	13
<i>Psila rosae</i> (Fabricius) group females		18

Opomyzidae

<i>Geomysa tripunctata</i> Fallén		18
<i>Opomyza florom</i> (Fabricius)		18
<i>O. germinationis</i> (Linnaeus)	8	13

Lonchaeidae

<i>Lonchaea chorea</i> (Fabricius)	8	
<i>L. laticornis</i> Meigen		18

Clusiidae

<i>Clusia flava</i> (Meigen)	8	13	
<i>Clusiodes albimana</i> (Meigen)	8		sp. ♀ in 18
<i>C. gentilis</i> (Collin)	8		

Sepsidae

<i>Themira annulipes</i> (Meigen)		18
<i>Nemopoda nitidula</i> (Fallén)	13	
<i>Sepsis cynipsea</i> (Linnaeus)	13	
<i>S. fulgens</i> Meigen	13	18
<i>S. orthocnemis</i> Frey	13	18
<i>S. punctum</i> (Fabricius)		18

Heleomyzidae

<i>Suillia affinis</i> (Meigen)	8	13	18
<i>S. atricornis</i> (Meigen)	8	13	
<i>S. bicolor</i> (Zetterstedt)		13	
<i>S. fuscicornis</i> (Zetterstedt)	8		18
<i>S. notata</i> (Meigen)		13	
<i>S. ustulata</i> (Meigen)			
<i>S. variegata</i> (Loew)	8	13	18
<i>Tephrochlamys rufiventris</i> (Meigen)	8		

Trixoscelididae

<i>Trixoscelis frontalis</i> sensu Hackman (= <i>canescens</i> of Collin)		18
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Piophilidae

<i>Allopiophila luteata</i> (Haliday)	8
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Asteiidae

<i>Asteia concinna</i> Meigen		18
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Camillidae

<i>Camilla flavicauda</i> Duda (= <i>glabrata</i> Collin)	18
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Drosophilidae

<i>Stegana similis</i> Laštovka & Maça	8	
<i>Amiota alboguttata</i> (Wahlberg) (sensu Maça)		18
<i>Chymomyza fuscimana</i> (Zetterstedt)	8	
<i>Scaptomyza (S.) flava</i> (Fallén)		18
<i>S. (Parascaptomyza) pallida</i> (Zetterstedt)	8	13
<i>Drosophila andalusiaca</i> Strobl	8	
<i>D. cameraria</i> Haliday		18
<i>D. fenestrarum</i> Fallén		18
<i>D. kuntzei</i> Duda		13
<i>D. phalerata</i> Meigen	8	13
<i>D. subobscura</i> Collin in Gordon	8	13
		18

Campichoetidae

<i>Campichoeta obscuripennis</i> (Meigen)	8	
<i>C. punctum</i> (Meigen)		18

Diastatidae

<i>Diastata costata</i> Meigen	8
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Ephydriidae

<i>Coenia</i> species female		18
<i>Hydrellia</i> species female (not determined)		
<i>Limnella quadrata</i> (Fallén)	8	18
<i>Philygria stictica</i> (Meigen)		18
<i>Trimerina madizans</i> (Fallén)		18

Carnidae

<i>Meoneura neottiophila</i> Collin	8
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Odiniidae

<i>Odinia boletina</i> (Zetterstedt)	8
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Sphaeroceridae

<i>Crumomyia fimetaria</i> (Meigen)	8	
<i>Chaetopodella scutellaris</i> (Haliday)		13
<i>Opacifrons coxata</i> (Stenhammar)		18
<i>O. humida</i> (Haliday)	13	18
<i>O. septentrionalis</i> (Stenhammar)		18
<i>Minilimosina vitripennis</i> (Zetterstedt)		18
<i>Pullimosina moesta</i> (Villeneuve)	8	13
<i>P. pullula</i> (Zetterstedt)		18
<i>Spelobia palmata</i> (Richards)	8	13
<i>S. parapusio</i> (Dahl)	8	18

Agromyzidae

<i>Agromyza mobilis</i> Meigen	8		18
<i>Liriomyza flaveola</i> (Fallén)	8	13	18
<i>Napomyza hirticornis</i> (Hendel)			18
<i>Phytomyza crassisetata</i> Zetterstedt			18
<i>P. ranunculi</i> (Schrink)	8		
<i>Cerodontha (C.) denticornis</i> (Panzer)	8		18
<i>C. (Poemyza) atra</i> (Meigen)			18
<i>C. (Dizygomyza) luctuosa</i> (Meigen)			18

Chloropidae

<i>Tricimba cincta</i> (Meigen)	8		18
<i>Gaurax fascipes</i> (Becker)			18
<i>Elachiptera tuberculifera</i> (Corti)		13	18
<i>Oscinella</i> species (frit group, not determined)	8	13	18
<i>Chlorops adjunctus</i> Becker		13	
<i>C. hypostigma</i> Meigen		13	18
<i>Meromyza bohemica</i> Fedoseeva			18

Scathophagidae

<i>Cordilura albipes</i> (Fallén)	8		
<i>Scathophaga furcata</i> (Say)			18
<i>S. stercoraria</i> (Linnaeus)	8	13	18

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

<i>Anthomyia</i> species female (not determined)			18
<i>Botanophila fugax</i> (Meigen)	8	13	18
<i>B. striolata</i> (Fallén)			18
<i>Botanophila</i> or <i>Delia</i> females (not determined)	8	13	18
<i>Delia criniventris</i> (Zetterstedt)	8		
<i>D. platura</i> (Meigen) (= <i>cilicrura</i>)	8		18
<i>D. florilega</i> (Zetterstedt) (= <i>trichodactyla</i>)	8		18
<i>Emmesomyia sócia</i> (Fallén) (= <i>villica</i> Meigen)	8	13	18
<i>Eutrichota</i> (= <i>Pegomyza</i>) <i>praepotens</i> (Wiedemann)			
<i>Hylemya urbica</i> (van der Wulp) (= <i>latifrons</i> Schnabl) -8-			18
<i>H. vagans</i> (Panzer) (= <i>strenua</i> Robineau-Desvoidy) 8		13	18
<i>H. variata</i> (Fallén)	8		18
<i>Hylemyza partita</i> (Meigen) (= <i>lasciva</i>)	8	13	18
<i>Mycophaga testacea</i> (Gimmerthal)	8	13	18
<i>Paregle audacula</i> (Harris) (= <i>radicum</i> auctt.)	8		
<i>Pegoplata nitidicauda</i> (Schnabl) (= <i>virginea</i> auctt.)		13	18
<i>Pegomya bicolor</i> (Wiedemann)			18
<i>P. caesia</i> Stein			18
<i>P. calyptrata</i> (Zetterstedt)		13	18
<i>P. winthemi</i> (Meigen)		13	

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

<i>Muscina prolapta</i> (Harris) (= <i>pabulorum</i> (Fallén))		18
<i>Azelia nebulosa</i> Robineau-Desvoidy (= <i>macquarti</i> (Staeger)) 8	13	

<i>Hydrotaea albipuncta</i> (Zetterstedt)			18
<i>H. armipes</i> (Fallén)			18
<i>H. cyrtoneurina</i> (Zetterstedt)		13	
<i>H. irritans</i> (Fallén)	8	13	18
<i>H. meteorica</i> (Linnaeus)			18
<i>Mesembrina meridiana</i> (Linnaeus)			18
<i>Polites lardarius</i> (Fabricius)	8	13	18
<i>Musca autumnalis</i> De Geer		13	18
<i>Morellia aenescens</i> Robineau-Desvoidy	8	13	18
<i>Neomyia</i> (= <i>Orthellia</i>) <i>cornicina</i> (Fabricius) (= <i>caesarion</i> (Meigen))	8		18
<i>N. viridescens</i> (Robineau-Desvoidy) (= <i>cornicina</i> auctt.)			18
<i>Eudasypheora</i> (= <i>Dasyphora</i>) <i>cyanella</i> (Meigen)			18
<i>Phaonia angelicae</i> (Scopoli) (= <i>basalis</i> (Zetterstedt))	8	13	18
<i>P. errans</i> (Meigen)	8	13	18
<i>P. mystica</i> (Meigen) (= <i>vittifera</i> (Zetterstedt))			18
<i>P. pallida</i> (Fabricius)		13	18
<i>P. rufiventris</i> (Scopoli) (= <i>populi</i> (Meigen))	8	13	18
<i>P. subventa</i> (Harris) (= <i>variegata</i> (Meigen))			18
<i>P. tuguriorum</i> (Scopoli) (= <i>signata</i> (Meigen))			18
<i>P. valida</i> (Harris) (= <i>viarum</i> Robineau-Desvoidy)	8	13	18
<i>Helina abdominalis</i> (Zetterstedt)			18
<i>H. depuncta</i> (Fallén)	8	13	18
<i>H. impuncta</i> (Fallén)	8	13	18
<i>H. lasiophthalma</i> (Macquart)			18
<i>H. quadrum</i> (Fabricius)			18
<i>H. reversio</i> (Harris) (= <i>duplicata</i> (Meigen))			18
<i>Mydaea ancilla</i> (Meigen)	8		18
<i>M. corni</i> (Scopoli) (= <i>scutellaris</i> Robineau-Desvoidy)	8		
<i>M. electa</i> (Zetterstedt)		13	
<i>M. humeralis</i> Robineau-Desvoidy (= <i>tincta</i> (Zetterstedt))		13	
<i>M. nebulosa</i> (Stein)	8	13	
<i>M. urbana</i> (Meigen)			18
<i>Myospila meditabunda</i> (Fabricius)			18
<i>Hebecnema umbratica</i> (Meigen)			18
<i>H. vespertina</i> (Fallén) (= <i>affinis</i> Malloch)			18
<i>Graphomya maculata</i> (Scopoli)			18
<i>Coenosia agromyzina</i> (Fallén)	8	13	18
<i>C. albicornis</i> Meigen (= <i>lineatipes</i> (Zetterstedt))	8	13	18
<i>C. infantula</i> Rondani			18
<i>C. mollicula</i> (Fallén)		13	18
<i>C. testacea</i> Robineau-Desvoidy (= <i>tricolor</i> (Zetterstedt))			18
<i>C. tigrina</i> (Fabricius)			18

Fanniidae

<i>Piezura graminicola</i> (Zetterstedt)		13	18
<i>Fannia genualis</i> (Stein)			18
<i>F. gotlandica</i> Ringdahl	8		
<i>F. pallitibia</i> (Rondani)	8	13	18
<i>F. parva</i> (Stein)			18
<i>F. serena</i> (Fallén)			18

(many undetermined females of <i>Fannia</i> probably belong to latter)	8	13	18
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Rhinophoridae

<i>Paykullia maculata</i> (Fallén)	8	18	
<i>Rhinophora lepida</i> (Meigen)		18	

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

<i>Melanomya nana</i> (Meigen)	18		
<i>Bellardia viarum</i> (Robineau-Desvoidy) (= <i>pusilla</i> auctt., <i>aculeata</i> (Pandellé))	18		
<i>Melinda viridicyanea</i> (Robineau-Desvoidy) (= <i>cognata</i> Meigen)		18	
	13		18
<i>Calliphora vicina</i> Robineau-Desvoidy	13	18	
<i>Lucilia ampullacea</i> Villeneuve	13	18	
<i>L. caesar</i> (Linnaeus)	8	13	18
<i>L. sericata</i> (Meigen)	8		18
<i>L. silvarum</i> (Meigen)		18	
<i>Pollenia angustigena</i> Wainwright		18	
<i>P. pediculata</i> Macquart (= <i>pseudorudis</i> Rognes)	8		18

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

<i>Helicophagella agnata</i> (Rondani)	18		
<i>Heteronychia haemorrhoa</i> Meigen	18		
<i>Parasarcophaga caerulescens</i> (Zetterstedt) (= <i>scoparia</i> (Pandellé))	18		
<i>Sarcophaga carnaria</i> (Linnaeus) (= <i>schulzi</i> Muller, var. <i>vulgaris</i> Rohdendorf of van Emden)	13	18	
<i>S. subvicina</i> Rohdendorf	18		
<i>S. variegata</i> (Scopoli) (= <i>carnaria</i> auctt., typical form of van Emden)	13	18	
<i>Sarcophaga</i> species females (not determined)	8	13	18

Tachinidae (determined from and following Belshaw, RES Handbook)

<i>Ligeria angusticornis</i> (Loew)	18		
<i>Phryxe nemea</i> (Meigen)	18		
<i>Pales pavida</i> (Meigen)	18		
<i>Macquartia tenebricosa</i> (Meigen)	18		
<i>Actia lamia</i> (Meigen)	18		
<i>A. pilipennis</i> (Fallén)	18		
<i>Siphona cristata</i> (Fabricius)	8	18	
<i>S. geniculata</i> (De Geer)	8	18	
<i>S. maculata</i> Staeger		18	
<i>Dexiosoma caninum</i> (Fabricius)		13	

LIST OF DIPTERA PRESENT IN TRAP 8 (all species)

Tipulidae

Tipula paludosa Meigen

Limoniidae

Ilisia maculata (Meigen)

Limonia nubeculosa Meigen

Neolimonia dumetorum (Meigen)

Rhipidia maculata Meigen (= *duplicata* auctt.)

Anisopodidae

Sylvicola cinctus (Fabricius)

Psychodidae

In small numbers (not determined)

Chironomidae

A few specimens (not determined)

Ceratopogonidae

Forcipomyia species (not determined)

Keroplatidae

Neoplatyura modesta (Winnertz)

N. nigricauda (Strobl)

Mycetophilidae

Monoclonia rufilatera (Walker)

Acnemia nitidicollis (Meigen)

Megalopelma nigroclavatum (Strobl)

Boletina species (female of *sciarina* group)

Synapha vitripennis (Meigen)

Apolephthisa subincana (Curtis)

Leia bimaculata (Meigen)

Tetragoneura sylvatica (Curtis)

Ectrepesthoneura colyeri Chandler

Cordyla crassicornis Meigen

C. murina Winnertz Group species B

Brevicornu boreale (Lundström)

B. sericoma (Meigen)

Mycetophila britannica Laštovka & Kidd

M. fungorum (De Geer)

M. trinotata Staeger

Sceptonia nigra (Meigen)

TRAP 8, all species

Platurocypta testata (Edwards)

Sciaridae

Trichosia (T.) caudata (Walker)
T. (T.) splendens Winnertz
Phytosciara flavipes (Meigen)
undetermined Sciaridae

Cecidomyiidae

Hybotidae

Trichinomyia flavipes (Meigen)
Hybos culiciformis (Fabricius)
Platypalpus longicornis (Meigen)
P. pectoralis (Fallén)
Tachypeza nubila (Meigen)
Tachydromia aemula (Loew)
Drapetis (D.) parilis Collin
D. (Elaphropeza) ephippiata (Fallén)

Empididae

Empis livida Linnaeus
Phyllodromia melanocephala (Fabricius)

Dolichopodidae

Rhaphium appendiculatum (Zetterstedt)
Chrysotimus concinnus (Zetterstedt)
Syntormon pallipes (Fabricius)
Campsicnemus curvipes (Fallén)
Argyra argentina (Meigen)
Chrysotus species (females of *gramineus* group)
Dolichopus festivus Haliday
D. griseipennis Stannius
D. longicornis Stannius
D. wahlbergi Zetterstedt
Medetera abstrusa Thuneberg
M. impigra (Fallén)
M. pallipes (Zetterstedt)
M. truncorum Meigen

Lonchopteridae

Lonchoptera lutea Panzer

Phoridae

Anevrina thoracica (Meigen)
Borophaga incrassata (Meigen)
Chaetopleurophora erythronota (Strobl)

TRAP 8, all species

Conicera floricola Schmitz
Diplonevra concinna (Meigen)
D. *nitidula* (Meigen)
D. *pilosella* Schmitz
Gymnophora arcuata (Meigen)
Megaselia species (not determined)
Metopina galeata (Haliday)
M. *heselhausi* Schmitz
Phora atra (Meigen)
P. *edentata* Schmitz
Spiniphora bergenstammi (Mik)
Triphleba nudipalpis (Becker)

Pipunculidae

Chalarus species (not determined)
Cephalops semifumosus (Kowarz)

Syrphidae

Syrphus vitripennis Meigen
Episyrphus balteatus (De Geer)
Melanostoma mellinum (Linnaeus)
M. *scalare* (Fabricius)
Platycheirus albimanus (Fabricius)
Cheilosia intonsa Loew
C. *paganus* (Meigen)
Rhingia campestris Meigen
Ferdinandea cuprea (Scopoli)

Pallopteridae

Palloptera ustulata Fallén

Dryomyzidae

Dryomyza analis (Fallén) (= *anilis* auctt.)

Sciomyzidae

Tetanocera hyalipennis von Roser
Trypetoptera punctulata (Scopoli)

Lauxaniidae

Sapromyza hyalinata (Meigen)
S. *sexpunctata* Meigen
Tricholauxania praeusta (Fallén)
Aulogastromyia anisodactyla (Loew)
Lyciella decempunctata (Fallén)
L. *pallidiventris* group females
L. *rorida* (Fallén)

TRAP 8, all species

L. *subfasciata* (Zetterstedt)

Psilidae

Loxocera albiseta (Schrank)

Psilosoma (= *Camptopsila*) *lefebvrei* (Zetterstedt)

Opomyzidae

Opomyza germinationis (Linnaeus)

Lonchaeidae

Lonchaea chorea (Fabricius)

Clusiidae

Clusia flava (Meigen)

Clusiodes albimana (Meigen)

C. *gentilis* (Collin)

Heleomyzidae

Suillia affinis (Meigen)

S. *atricornis* (Meigen)

S. *fuscicornis* (Zetterstedt)

S. *variegata* (Loew)

Tephrochlamys rufiventris (Meigen)

Piophilidae

Allopiophila luteata (Haliday)

Drosophilidae

Stegana similis Laštovka & Maça

Chymomyza fuscimana (Zetterstedt)

Scaptomyza (Parascaptomyza) pallida (Zetterstedt)

Drosophila andalusiaca Strobl

D. *phalerata* Meigen

D. *subobscura* Collin in Gordon

Campichoetidae

Campichoeta obscuripennis (Meigen)

Diastatidae

Diastata costata Meigen

TRAP 8, all species

Ephydriidae

Limnella quadrata (Fallén)

Carnidae

Meoneura neottiophila Collin

Odiniidae

Odinia boletina (Zetterstedt)

Sphaeroceridae

Crumomyia fimetaria (Meigen)

Pullimosina moesta (Villeneuve)

Spelobia palmata (Richards)

S. parapusio (Dahl)

Agromyzidae

Agromyza mobilis Meigen

Liriomyza flaveola (Fallén)

Phytomyza ranunculi (Schrank)

Cerodontha (C.) denticornis (Panzer)

Chloropidae

Tricimba cincta (Meigen)

Oscinella species (frit group, not determined)

Scathophagidae

Cordilura albipes (Fallén)

Scathophaga stercoraria (Linnaeus)

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila fugax (Meigen)

Botanophila or *Delia* females (not determined)

Delia criniventris (Zetterstedt)

D. platura (Meigen) (= *cilicrura*)

D. florilega (Zetterstedt) (= *trichodactyla*)

Emmesomyia socia (Fallén) (= *villica* Meigen)

H. vagans (Panzer) (= *strenua* Robineau-Desvoidy)

H. variata (Fallén)

Hylemyza partita (Meigen) (= *lasciva*)

Mycophaga testacea (Gimmerthal)

Paregle audacula (Harris) (= *radicum* auctt.)

TRAP 8, all species

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Azelia nebulosa Robineau-Desvoidy (= *macquarti* (Staeger))
Hydrotaea irritans (Fallén)
Polistes lardarius (Fabricius)
Morellia aenescens Robineau-Desvoidy
Neomyia (= *Orthellia*) *cornicina* (Fabricius) (= *caesarion* (Meigen))
Phaonia angelicae (Scopoli) (= *basalis* (Zetterstedt))
P. errans (Meigen)
P. rufiventris (Scopoli) (= *populi* (Meigen))
P. valida (Harris) (= *viarum* Robineau-Desvoidy)
Helina abdominalis (Zetterstedt)
H. depuncta (Fallén)
H. impuncta (Fallén)
Mydaea ancilla (Meigen)
M. corni (Scopoli) (= *scutellaris* Robineau-Desvoidy)
M. nebulosa (Stein)
Coenosia agromyzina (Fallén)
C. albicornis Meigen (= *lineatipes* (Zetterstedt))

Fanniidae

Fannia gotlandica Ringdahl
F. pallitibia (Rondani)
Fannia (undetermined females)

Rhinophoridae

Paykullia maculata (Fallén)

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Lucilia caesar (Linnaeus)
L. sericata (Meigen)
Pollenia pediculata Macquart (= *pseudorudis* Rognes)

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga species females (not determined)

Tachinidae (determined from and following Belshaw, RES Handbook)

Siphona cristata (Fabricius)
S. geniculata (De Geer)

LIST OF DIPTERA PRESENT IN TRAP 8 ON 9TH AUGUST

Limoniidae

Rhipidia maculata Meigen (= *duplicata* auctt.) 1♀

Ceratopogonidae

Forcipomyia species (not determined) 2 specimens

Keroplatidae

Neoplatyura modesta (Winnertz) 1♂

Mycetophilidae

Acnemia nitidicollis (Meigen) 2♂

Cordyla murina Winnertz Group species B 1♂

Sciaridae

undetermined Sciaridae 1 specimen

Cecidomyiidae 2 specimens

Hybotidae

Hybos culiciformis (Fabricius) 2♂, 2♀

Tachypeza nubila (Meigen) 2♂

Drapetis (D.) parilis Collin 3♂, 4♀

D. (Elaphropeza) ephippiata (Fallén) 3♂, 2♀

Empididae

Empis livida Linnaeus 1♂, 1♀

Dolichopodidae

Argyra argentina (Meigen) 1♂

Chrysotus species (females of *gramineus* group) 6♀

Dolichopus longicornis Stannius 1♀

Medetera impigra (Fallén) 1♂, 6♀

Phoridae

Diplonevra concinna (Meigen) 1♂

D. nitidula (Meigen) 6♂, 1♀

D. pilosella Schmitz 1♂

Gymnophora species female 1♀

Megaselia species (not determined) 26♂, 25♀

Phora atra (Meigen) 1♂

Phora species females (not determined) 2♀

Triphleba nudipalpis (Becker) 2♂

TRAP 8, 9th August

Syrphidae

Syrrhus vitripennis Meigen 1♀
Episyrphus balteatus (De Geer) 9♂, 21♀
Melanostoma mellinum (Linnaeus) 1♂
M. scalare (Fabricius) 1♂
Cheilosia intonsa Loew 2♀

Sciomyzidae

Tetanocera hyalipennis von Roser 1♀

Lauxaniidae

Sapromyza hyalinata (Meigen) 1♀
S. sexpunctata Meigen 4♂
Tricholauxania praeusta (Fallén) 2♀
Lyciella decempunctata (Fallén) 1♀

Clusiidae

Clusiodes species female 2♀

Heleomyzidae

Suillia variegata (Loew) 1♀

Drosophilidae

Stegana similis Laštovka & Maça 1♂
Chymomyza fuscimana (Zetterstedt) 2♂, 1♀
Scaptomyza (Parascaptomyza) pallida (Zetterstedt) 1♂, 3♀

Campichoetidae

Campichoeta obscuripennis (Meigen) 1♂

Ephydriidae

Limnellia quadrata (Fallén) 1♂

Carnidae

Meoneura neottiophila Collin 1♂

Odiniidae

Odinia boletina (Zetterstedt) 2♂

Sphaeroceridae

Spelobia palmata (Richards) 1♂, 7♀

TRAP 8, 9th August

Agromyzidae

Agromyza mobilis Meigen 2♂
Liriomyza flaveola (Fallén) 1♂, 3♀
Phytomyza ranunculi (Schrank) 1♀
Phytomyza species female 1♀

Chloropidae

Tricimba cincta (Meigen) 1♀

Scathophagidae

Cordilura albipes (Fallén) 1♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila fugax (Meigen) 20♂
Botanophila or *Delia* females (not determined) 30♀
Delia platura (Meigen) (= *cilicrura*) 3♂
D. florilega (Zetterstedt) (= *trichodactyla*) 2♂
Emmesomyia socia (Fallén) (= *villica* Meigen) 1♀
Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 1♀
H. variata (Fallén) 1♂
Paregle audacula (Harris) (= *radicum* auctt.) 1♂

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 5♀
Morellia aenescens Robineau-Desvoidy 1♀
Phaonia angelicae (Scopoli) (= *basalis* (Zetterstedt)) 1♀
P. errans (Meigen) 2♀
P. rufiventris (Scopoli) (= *populi* (Meigen)) 1♀
P. valida (Harris) (= *viarum* Robineau-Desvoidy) 1♂, 3♀
Helina abdominalis (Zetterstedt) 1♀
Coenosia agromyzina (Fallén) 1♂
C. albicornis Meigen (= *lineatipes* (Zetterstedt)) 2♂

Fanniidae

Fannia gotlandica Ringdahl 1♀
F. pallitibia (Rondani) 1♀
Fannia females (not determined) 28♀

Rhinophoridae

Paykullia maculata (Fallén) 1♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Pollenia pediculata Macquart (= *pseudorudis* Rognes) 1♂

TRAP 8, 9th August

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga species females 2♀

Tachinidae (determined from and following Belshaw, RES Handbook)

Siphona species female 1♀

LIST OF DIPTERA PRESENT IN TRAP 8 ON 12TH AUGUST

Limoniidae

Rhipidia maculata Meigen (= *duplicata* auctt.) 1♀

Psychodidae

1 specimen

Chironomidae

4 specimens

Mycetophilidae

Apolephthisa subincana (Curtis) 1♀
Ectrepesthoneura colyeri Chandler 1♂
Brevicornu sericoma (Meigen) 1♂
Mycetophila trinotata Staeger 1♂

Sciaridae

Trichosia (T.) caudata (Walker) 1♂

Hybotidae

Drapetis (D.) parilis Collin 1♀

Empididae

Phyllodromia melanocephala (Fabricius) 1♀

Dolichopodidae

Chrysotimus concinnus (Zetterstedt) 1♀
Campsicnemus curvipes (Fallén) 2♂
Dolichopus griseipennis Stannius 1♂
Medetera species 1♀

Phoridae

Diplonevra nitidula (Meigen) 2♂, 2♀
Megaselia species (not determined) 6♂, 11♀
Phora edentata Schmitz 2♂
Triphleba nudipalpis (Becker) 1♂

Syrphidae

Episyrphus balteatus (De Geer) 1♂

Sciomyzidae

Trypetoptera punctulata (Scopoli) 1♂

TRAP 8, 12th August

Lauxaniidae

Sapromyza sexpunctata Meigen 1♂, 1♀

Lyciella rorida (Fallén) 1♀

Clusiidae

Clusia flava (Meigen) 1♀

Heleomyzidae

Suillia variegata (Loew) 1♂

Drosophilidae

Chymomyza fuscimana (Zetterstedt) 2♂

Scaptomyza (Parascaptomyza) pallida (Zetterstedt) 1♀

Drosophila phalerata Meigen 1♂

D. subobscura Collin in Gordon 1♂, 1♀

Ephydriidae

Limnellia quadrata (Fallén) 1♂

Sphaeroceridae

Pullimosina moesta (Villeneuve) 1♀

Agromyzidae

Liriomyza flaveola (Fallén) 1♂

Chloropidae

Oscinella species (not determined) 1 example

Scathophagidae

Scathophaga stercoraria (Linnaeus) 1♂

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila fugax (Meigen) 3♂

Botanophila or *Delia* females (not determined) 10♀

Delia criniventris (Zetterstedt) 1♂

Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 1♀

Phaonia valida (Harris) (= *viarum* Robineau-Desvoidy) 1♂

LIST OF DIPTERA PRESENT IN TRAP 8 ON 16TH AUGUST

Chironomidae

2 specimens

Mycetophilidae

Acnemia nitidicollis (Meigen) 2♂
Megalopelma nigroclavatum (Strobl) 4♂
Apolephthisa subincana (Curtis) 1♂
Cordyla crassicornis Meigen 1♂
Sceptonia nigra (Meigen) 1♂

Sciaridae

undetermined Sciaridae 2

Cecidomyiidae

8 specimens

Hybotidae

Hybos culiciformis (Fabricius) 1♂
Platypalpus pectoralis (Fallén) 1♀
Tachypeza nubila (Meigen) 1♂
Drapetis (D.) parilis Collin 1♀
D. (Elaphropeza) ephippiata (Fallén) 1♂

Dolichopodidae

Chrysotimus concinnus (Zetterstedt) 1♂
Chrysotus species (females of *gramineus* group) 2♀
Dolichopus festivus Haliday 1♂
Medetera abstrusa Thuneberg 1♀
M. impigrá (Fallén) 1♀
M. pallipes (Zetterstedt) 1♀
M. truncorum Meigen 1♂

Phoridae

Borophaga incrassata (Meigen) 1♀
Conicera floricola Schmitz 8♂
Diplonevra nitidula (Meigen) 8♂, 3♀
D. pilosella Schmitz 1♂
Diplonevra species 1♀
Megaselia species (not determined) 23♂, 18♀
Phora edentata Schmitz 1♂
Triphleba nudipalpis (Becker) 6♂

Syrphidae

Episyrphus balteatus (De Geer) 1♂, 2♀
Melanostoma scalare (Fabricius) 1♀

TRAP 8, 16th August

Pallopteridae

Palloptera ustulata Fallén 1♀

Sciomyzidae

Tetanocera hyalipennis von Roser 1♂

Lonchaeidae

Lonchaea chorea (Fabricius) 1♂

Clusiidae

Clusia flava (Meigen) 1♀

Clusiodes gentilis (Collin) 1♂

Heleomyzidae

Suillia variegata (Loew) 1♂

Drosophilidae

Chymomyza fuscimana (Zetterstedt) 5♂

Ephydriidae

Limnella quadrata (Fallén) 2♂, 6♀

Agromyzidae

Liriomyza flaveola.(Fallén) 4♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila fugax (Meigen) 1♂

Botanophila or *Delia* females (not determined) 2♀

Delia platura (Meigen) (= *cilicrura*) 1♂

Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 1♂, 2♀

Hylemyza partita (Meigen) (= *lasciva*) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Azelia nebulosa Robineau-Desvoidy (= *macquarti* (Staeger)) 1♂

Hydrotaea irritans (Fallén) 1♀

Polietes lardarius (Fabricius) 2♂

Morellia aenescens Robineau-Desvoidy 1♂, 1♀

Phaonia valida (Harris) (= *viarum* Robineau-Desvoidy) 1♂, 3♀

Coenosia albicornis Meigen (= *lineatipes* (Zetterstedt)) 1♀

TRAP 8, 16th August

Fanniidae

Fannia (undetermined females) 3♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Lucilia caesar (Linnaeus) 1♂

LIST OF DIPTERA PRESENT IN TRAP 8 ON 18TH AUGUST

Limoniidae

Ilisia maculata (Meigen) 1♀
Limonia nubeculosa Meigen 1♂

Psychodidae

1 specimen (not determined)

Chironomidae

1 specimen (not determined)

Keroplatidae

Neoplatyura modesta (Winnertz) 1♂

Mycetophilidae

Acnemia nitidicollis (Meigen) 2♂, 1♀
Synapha vitripennis (Meigen) 1♂
Brevicornu sericoma (Meigen) 1♂
Mycetophila fungorum (De Geer) 1♂
Platurocypta testata (Edwards) 1♂

Sciaridae

Trichosia (T.) caudata (Walker) 2♂
T. (T.) *splendens* Winnertz 1♂

Cecidomyiidae

3 specimens

Hybotidae

Platypalpus pectoralis (Fallén) 1♀
D. (Elaphropeza) ephippiata (Fallén) 1♂

Dolichopodidae

Chrysotus species (females of *gramineus* group) 1♀
Dolichopus griseipennis Stannius 1♀
Medetera impigra (Fallén) 1♀

Phoridae

Diplonevra nitidula (Meigen) 4♂, 5♀
Megaselia species (not determined) 7♂, 9♀
Triphleba nudipalpis (Becker) 5♂

TRAP 8, 18th August

Syrphidae

Episyrphus balteatus (De Geer) 1♂
Melanostoma scalare (Fabricius) 1♂, 1♀

Lauxaniidae

Aulogastromyia anisodactyla (Loew) 1♀
Lyciella rorida (Fallén) 1♀

Opomyzidae

Opomyza germinationis (Linnaeus) 1♂

Clusiidae

Clusiodes species 1♀

Heleomyzidae

Suillia variegata (Loew) 1♂, 1♀

Drosophilidae

Chymomyza fuscimana (Zetterstedt) 2♂
Drosophila andalusiaca Strobl 1♂

Ephydriidae

Limnella quadrata (Fallén) 1♂

Sphaeroceridae

Spelobia palma (Richards) 2♂, 1♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila or *Delia* females (not determined) 2♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 1♀
Polites lardarius (Fabricius) 1♂
Phaonia valida (Harris) (= *viarum* Robineau-Desvoidy) 1♀
Helina abdominalis (Zetterstedt) 1♀
Mydaea corni (Scopoli) (= *scutellaris* Robineau-Desvoidy) 1♀
M. nebulosa (Stein) 1♀
Coenosia albicornis Meigen (= *lineatipes* (Zetterstedt)) 3♀

Fanniidae

Fannia (undetermined females) 1♀

LIST OF DIPTERA PRESENT IN TRAP 8 ON 23RD AUGUST

Psychodidae

3 specimens (not determined)

Chironomidae

2 specimens (not determined)

Keroplatidae

Neoplatyura modesta (Winnertz) 1♀

Mycetophilidae

Acnemia nitidicollis (Meigen) 6♂

Brevicornu species female 1♀

Sciaridae

Trichosia (T.) splendens Winnertz 1♂

undetermined Sciaridae 4

Cecidomyiidae

9 specimens

Hybotidae

Hybos culiciformis (Fabricius) 1♂

Tachypeza nubila (Meigen) 3♂, 1♀

D. (Elaphropeza) ephippiata (Fallén) 1♂, 1♀

Dolichopodidae

Dolichopus griseipennis Stannius 1♂

D. wahlbergi Zetterstedt 2♂, 1♀

Medetera abstrusa Thuneberg 2♂

Phoridae

Diplonevra concinna (Meigen) 1♂

D. nitidula (Meigen) 5♂, 2♀

D. pilosella Schmitz 4♂

Diplonevra species females 4♀

Megaselia species (not determined) 10♂, 19♀

Triphleba nudipalpis (Becker) 6♂, 1♀

Pipunculidae

Chalarus species (not determined) 1♂

Cephalops semifumosus (Kowarz) 1♀

TRAP 8, 23rd August

Syrphidae

Melanostoma scalare (Fabricius) 1♀

Pallopteridae

Palloptera ustulata Fallén 1♀

Opomyzidae

Opomyza germinationis (Linnaeus) 1♀

Heleomyzidae

Suillia affinis (Meigen) 1♂

S. variegata (Loew) 1♀

Tephrochlamys rufiventris (Meigen) 1♂

Piophilidae

Allopiophila luteata (Haliday) 1♂, 1♀

Drosophilidae

Chymomyza fuscimana (Zetterstedt) 2♂

Drosophila subobscura Collin in Gordon 1♀

Sphaeroceridae

Spelobia palmata (Richards) 3♂

Agromyzidae

Cerodontha (C.) denticornis (Panzer) 1♀

Chloropidae

Oscinella species (frit group, not determined) 1♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila fugax (Meigen) 1♂

Botanophila or *Delia* females (not determined) 1♀

Hylemya variata (Fallén) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 1♀

Polites lardarius (Fabricius) 1♂

Phaonia valida (Harris) (= *viarum* Robineau-Desvoidy) 2♀

Helina depuncta (Fallén) 2♀

H. impuncta (Fallén) 1♀

Coenosia agromyzina (Fallén) 1♂

TRAP 8, 23rd August

C. *albicornis* Meigen (= *lineatipes* (Zetterstedt)) 1♀

Fanniidae

Fannia (undetermined females) 2♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Lucilia sericata (Meigen) 1♂

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga species females (not determined) 1♀

Tachinidae (determined from and following Belshaw, RES Handbook)

Siphona geniculata (De Geer) 1♂

LIST OF DIPTERA PRESENT IN TRAP 8 ON 26TH AUGUST

Limoniidae

Ilisia maculata (Meigen) 1♀

Keroplatidae

Neoplatyura modesta (Winnertz) 1♀

Mycetophilidae

Acnemia nitidicollis (Meigen) 3♂, 1♀

Platurocypta testata (Edwards) 1♂

Sciaridae

undetermined Sciaridae 1

Cecidomyiidae

3 specimens

Hybotidae

Platypalpus longicornis (Meigen) 1♀

Tachypeza nubila (Meigen) 1♂

Dolichopodidae

Rhaphium appendiculatum (Zetterstedt) 1♂

Medetera impigra (Fallén) 2♀

M. truncorum Meigen 1♀

Phoridae

Conicera floricola Schmitz 1♂

Diplonevra concinna (Meigen) 1♂

D. nitidula (Meigen) 2♂, 2♀

D. pilosella Schmitz 3♂, 1♀

Megaselia species (not determined) 4♂, 4♀

Triphleba nudipalpis (Becker) 3♂

Pipunculidae

Chalarus species (not determined) 1♀

Syrphidae

Platycheirus albimanus (Fabricius) 1♀

Ferdinandea cuprea (Scopoli) 1♀

TRAP 8, 26th August

Heleomyzidae

Suillia variegata (Loew) 2♀

Diastatidae

Diastata costata Meigen 1♂

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila or *Delia* females (not determined) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 1♀

LIST OF DIPTERA PRESENT IN TRAP 8 ON 30TH AUGUST

Tipulidae

Tipula paludosa Meigen 1♀

Chironomidae

1 specimen (not determined)

Mycetophilidae

Monoclona rufilaterra (Walker) 4♂

Acnemia nitidicollis (Meigen) 2♂, 2♀

Megalopelma nigroclavatum (Strobl) 1♂

Apolephthisa subincana (Curtis) 1♂, 1♀

Tetragoneura sylvatica (Curtis) 1♂, 2♀

Ectrepesthoneura species 1♀

Cordyla crassicornis Meigen 1♂

Brevicornu boreale (Lundström) 1♂

Brevicornu species 1♀

Sciaridae

Phytosciara flavipes (Meigen) 1♂

undetermined Sciaridae 6♂, 3♀

Cecidomyiidae

13 specimens

Hybotidae

Hybos culiciformis (Fabricius) 2♂, 2♀

Tachypeza nubila (Meigen) 1♀

Tachydromia aemula (Loew) 1♀

Dolichopodidae

Medetera abstrusa Thuneberg 2♂

M. truncorum Meigen 1♀

Phoridae

Anevrina thoracica (Meigen) 1♂

Conicera floricola Schmitz 5♂

Diplonevra concinna (Meigen) 9♂

D. nitidula (Meigen) 10♂

D. pilosella Schmitz 2♂

Diplonevra species 1♀

Megaselia species (not determined) 28♂, 19♀

Metopina galeata (Haliday) 1♂

Phora edentata Schmitz 1♂

Spiniphora bergenstammi (Mik) 1♂

Triphleba nudipalpis (Becker) 10♂

TRAP 8, 30th August

Syrphidae

Syrophus vitripennis Meigen 1♀

Cheilosia pagana (Meigen) 1♀

Lauxaniidae

Lyciella pallidiventris group females 1♀

L. subfasciata (Zetterstedt) 1♀

Psilidae

Psilosoma (= *Camptopsila*) *lefebvrei* (Zetterstedt) 1♀

Opomyzidae

Opomyza germinationis (Linnaeus) 2♂

Clusiidae

Clusiodes species 1♀

Sphaeroceridae

Spelobia palmata (Richards) 4♂

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila or *Delia* females (not determined) 1♀

Emmesomyia socia (Fallén) (= *villica* Meigen) 1♀

Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 1♀

Hylemyza partita (Meigen) (= *lasciva*) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 1♀

Polietes lardarius (Fabricius) 3♂

Phaonia angelicae (Scopoli) (= *basalis* (Zetterstedt)) 1♀

P. valida (Harris) (= *viarum* Robineau-Desvoidy) 1♂, 1♀

Helina depuncta (Fallén) 1♀

Coenosia agromyzina (Fallén) 1♂, 2♀

Fanniidae

Fannia (undetermined females) 1♀

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga species females (not determined) 3♀

Tachinidae (determined from and following Belshaw, RES Handbook)

Siphona cristata (Fabricius) 1♂, 1♀

LIST OF DIPTERA PRESENT IN TRAP 8 ON 2ND SEPTEMBER

Limoniidae

Neolimonia dumetorum (Meigen) 1♂

Anisopodidae

Sylvicola cinctus (Fabricius) 1♀

Keroplatidae

Neoplatyura nigricauda (Strobl) 1♂

Mycetophilidae

Monoclona rufilatera (Walker) 1♂

Acnemia nitidicollis (Meigen) 1♂

Boletina species (female of *sciarina* group) 1♀

Sciaridae

Phytosciara flavipes (Meigen) 1♀

undetermined Sciaridae 1

Dolichopodidae

Dolichopus griseipennis Stannius 1♂

Lonchopteridae

Lonchoptera lutea Panzer 1♀

Phoridae

Diplonevra nitidula (Meigen) 4♂, 1♀

Triphleba nudipalpis (Becker) 1♂

Syrphidae

Rhingia campestris Meigen 1♀

Lauxaniidae

Sapromyza sexpunctata Meigen 1♀

Drosophilidae

Chymomyza fuscimana (Zetterstedt) 1♂, 1♀

Drosophila subobscura Collin in Gordon 1♀

TRAP 8, 2nd September

Sphaeroceridae

Crumomyia fimetaria (Meigen) 1♀

Spelobia parapusio (Dahl) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Polietes lardarius (Fabricius) 2♂

Phaonia valida (Harris) (= *viarum* Robineau-Desvoidy) 1♀

Helina depuncta (Fallén) 1♀

Mydaea ancilla (Meigen) 1♀

M. corni (Scopoli) (= *scutellaris* Robineau-Desvoidy) 1♀

LIST OF DIPTERA PRESENT IN TRAP 8 ON 6TH SEPTEMBER 1994

Psychodidae

1 specimen (not determined)

Mycetophilidae

Monoclona rufilatera (Walker) 1♂
Acnemia nitidicollis (Meigen) 4♂, 1♀
Apolephthisa subincana (Curtis) 1♀
Leia bimaculata (Meigen) 1♀
Sceptonia nigra (Meigen) 1♂

Sciaridae

Phytosciara flavipes (Meigen) 1♂, 1♀
undetermined Sciaridae 3

Cecidomyiidae

5 specimens

Hybotidae

Trichinomyia flavipes (Meigen) 1♀
Tachypeza nubila (Meigen) 1♂, 1♀
Drapetis (D.) parilis Collin 1♀

Dolichopodidae

Syntormon pallipes (Fabricius) 1♀
Medetera truncorum Meigen 1♀

Phoridae

Chaetopleurophora erythronota (Strobl) 1♂
Diplonevra nitidula (Meigen) 11♂
Megaselia species (not determined) 19♂, 5♀
Metopina heselhausi Schmitz 1♀
Spiniphora bergenstammi (Mik) 1♂

Syrphidae

Episyrphus balteatus (De Geer) 1♂

Psilidae

Loxocera albisetosa (Schrank) 1♀

Opomyzidae

Opomyza germinationis (Linnaeus) 1♂

TRAP 8, 6th September

Clusiidae

Clusiodes albimana (Meigen) 2♂

Chloropidae

Oscinella species (*frit* group, not determined) 6♂, 3♀

Scathophagidae

Scathophaga stercoraria (Linnaeus) 1♂

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila or *Delia* females (not determined) 2♀

Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 1♂

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Neomyia (= *Orthellia*) *cornicina* (Fabricius) (= *caesarion* (Meigen)) 1♂

Phaonia valida (Harris) (= *viarum* Robineau-Desvoidy) 1♀

Helina depuncta (Fallén) 2♀

Fanniidae

Fannia (undetermined females) 1♀

LIST OF DIPTERA PRESENT IN TRAP 8 ON 9TH SEPTEMBER 1994

Mycetophilidae

Monoclona rufilatera (Walker) 1♂
Acnemia nitidicollis (Meigen) 3♂
Mycetophila britannica Laštovka & Kidd 1♀
Platurocypta testata (Edwards) 1♂

Sciaridae

Phytosciara flavipes (Meigen) 2♂, 1♀
undetermined Sciaridae 1

Cecidomyiidae

1 specimen

Hybotidae

Trichinomyia flavipes (Meigen) 1♀
Tachypeza nubila (Meigen) 1♂, 1♀
Drapetis (D.) parilis Collin 1♀

Dolichopodidae

Syntormon pallipes (Fabricius) 1♀
Medetera truncorum Meigen 1♀

Phoridae

Diplonevra nitidula (Meigen) 9♂, 1♀
Megaselia species (not determined) 2♂, 1♀
Triphleba nudipalpis (Becker) 1♂

Syrphidae

Episyrphus balteatus (De Geer) 1♀

Dryomyzidae

Dryomyza analis (Fallén) (= *anilis* auctt.) 1♀

Heleomyzidae

Suillia atricornis (Meigen) 1♀
S. fuscicornis (Zetterstedt) 1♀

Drosophilidae

Chymomyza fuscimana (Zetterstedt) 1♂

TRAP 8, 9th September

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Neomyia (= *Orthellia*) *cornicina* (Fabricius) (= *caesarion* (Meigen)) 1♂
Helina depuncta (Fallén) 1♀

Fanniidae

Fannia (undetermined females) 1♀

LIST OF DIPTERA PRESENT IN TRAP 13 (all species)

Limoniidae

Molophilus appendiculatus (Staeger)
Limonia nubeculosa Meigen
Rhipidia maculata Meigen (= *duplicata* auctt.)

Psychodidae

Chironomidae

Bibionidae

Dilophus febrilis (Linnaeus)

Keroplatidae

Macrocera stigmoides Edwards
Neoplatyura modesta (Winnertz)

Mycetophilidae

Monoclona rufilatera (Walker)
Acnemia nitidicollis (Meigen)
Synapha vitripennis (Meigen)
Apolephthisa subincana (Curtis)
Rondaniella dimidiata (Meigen)
Trichonta vitta (Meigen)
Zygomyia humeralis (Wiedemann)
Z. *notata* (Stannius)
Z. *pictipennis* (Staeger)
Zygomyia species females (not determined)
Sceptonia membranacea Edwards
S. *tenuis* Edwards
Platurocypta punctum (Stannius)
P. *testata* (Edwards)

Sciaridae

Trichosia (*T.*) *splendens* Winnertz
T. (*Leptosciarella*) *glabra* (Meigen)
T. (*L.*) *pilosa* (Staeger)
Phytosciara flavipes (Meigen)
undetermined Sciaridae

Cecidomyiidae

Chorisops nagatomii Rozkošny

Rhagionidae

Rhagio lineolus Fabricius

TRAP 13, all species

Asilidae

Dioctria linearis (Fabricius)

Hybotidae

Hybos culiciformis (Fabricius)

Platypalpus longiseta (Zetterstedt)

P. pallipes (Fallén)

P. pectoralis (Fallén)

Tachypeza nubila (Meigen)

Drapetis (D.) parilis Collin

D. (Elaphropeza) ephippiata (Fallén)

Crossopalpus minimus (Meigen)

Empididae

Empis livida Linnaeus

Rhamphomyia erythrophthalma Meigen

(and its form *hirsutipes* Collin)

Dolichopodidae

Chrysotimus concinnus (Zetterstedt)

Sympycnus aeneicoxa (Meigen)

Bathycranium bicolorellum (Zetterstedt)

Campsicnemus curvipes (Fallén)

Argyra argentina (Meigen)

A. confinis (Zetterstedt)

Dolichopus griseipennis Stannius

D. wahlbergi Zetterstedt

Medetera abstrusa Thuneberg

M. truncorum, Meigen

Phoridae

Borophaga incrassata (Meigen)

Conicera floricola Schmitz

C. similis (Haliday)

Diplonevra concinna (Meigen)

D. nitidula (Meigen)

D. pilosella Schmitz

Diplonevra species females (not determined)

Gymnophora arcuata (Meigen)

Megaselia species (not determined)

Metopina galeata (Haliday)

Phalacrotophora fasciata (Fallén)

Phora atra (Meigen)

Phora species females (not determined)

Pseudacteon formicarum (Verrall)

Spiniphora bergenstammi (Mik)

Triphleba distinguenda (Strobl)

T. nudipalpis (Becker)

TRAP 13, all species

Pipunculidae

Chalarus species (not determined)
Cephalops semifumosus (Kowarz)
Eudorylas subfascipes Collin

Syrphidae

Episyrphus balteatus (De Geer)
Baccha elongata (Fabricius) sensu lato
Melanostoma scalare (Fabricius)
Helophilus pendulus (Linnaeus)

Pallopteridae

Palloptera ustulata Fallén

Dryomyzidae

Dryomyza analis (Fallén) (= *anilis* auctt.)

Sciomyzidae

Trypetoptera punctulata (Scopoli)

Lauxaniidae

Sapromyza sexpunctata Meigen
S. sordida Haliday
Tricholauxania praeusta (Fallén)
Lyciella decempunctata (Fallén)
L. rorida (Fallén)

Psilidae

Chyliza leptogaster (Panzer) (= *scutellata* (Fabricius))
Psilosoma (= *Camptopsila*) *lefebvrei* (Zetterstedt)

Opomyzidae

Opomyza germinationis (Linnaeus)

Clusiidae

Clusia flava (Meigen)

Sepsidae

Nemopoda nitidula (Fallén)
Sepsis cynipsea (Linnaeus)
S. fulgens Meigen

TRAP 13, all species

S. *orthocnemis* Frey

Heleomyzidae

Suillia affinis (Meigen)
S. atricornis (Meigen)
S. bicolor (Zetterstedt)
S. notata (Meigen)
S. variegata (Loew)

Drosophilidae

Scaptomyza (Parascaptomyza) pallida (Zetterstedt)
Drosophila kuntzei Duda
D. *phalerata* Meigen
D. *subobscura* Collin in Gordon

Sphaeroceridae

Chaetopodella scutellaris (Haliday)
Opacifrons humida (Haliday)
Pullimosina moesta (Villeneuve)
Spelobia palmata (Richards)

Agromyzidae

Liriomyza flaveola (Fallén)

Chloropidae

Elachiptera tuberculifera (Corti)
Oscinella species (not determined)
Chlorops adjunctus Becker
C. *hypostigma* Meigen

Scathophagidae

Scathophaga stercoraria (Linnaeus)

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila fugax (Meigen)
Botanophila or *Delia* females (not determined)
Emmesomyia socia (Fallén) (= *villica* Meigen)
Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy)
Hylemyza partita (Meigen) (= *lasciva*)
Mycophaga testacea (Gimmerthal)
Pegoplata nitidicauda (Schnabl) (= *virginea* auctt.)
Pegomya calyptrata (Zetterstedt)
P. *winthemi* (Meigen)

TRAP 13, all species

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Azelia nebulosa Robineau-Desvoidy (= *macquarti* (Staeger))
Hydrotaea cyrtoneurina (Zetterstedt)
H. irritans (Fallén)
Polietes lardarius (Fabricius)
Musca autumnalis De Geer
Morellia aenescens Robineau-Desvoidy
Phaonia angelicae (Scopoli) (= *basalis* (Zetterstedt))
P. errans (Meigen)
P. pallida (Fabricius)
P. rufiventris (Scopoli) (= *populi* (Meigen))
P. valida (Harris) (= *viarum* Robineau-Desvoidy)
Helina depuncta (Fallén)
H. impuncta (Fallén)
Mydaea electa (Zetterstedt)
M. humeralis Robineau-Desvoidy (= *tincta* (Zetterstedt))
M. nebulosa (Stein)
Coenosia agromyzina (Fallén)
C. albicornis Meigen (= *lineatipes* (Zetterstedt))
C. mollicula (Fallén)

Fanniidae

Piezura graminicola (Zetterstedt)
Fannia pallitibia (Rondani)
Fannia females (not determined)

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Melinda viridicyanea (Robineau-Desvoidy) (= *cognata* Meigen)
Calliphora vicina Robineau-Desvoidy
Lucilia ampullacea Villeneuve
L. caesar (Linnaeus)

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga carnaria (Linnaeus) (= *schulzi* Muller, var. *vulgaris* Rohdendorf of van Emden)
S. variegata (Scopoli) (= *carnaria* auctt., typical form of van Emden)
Sarcophaga species females

Tachinidae (determined from and following Belshaw, RES Handbook)

Dexiosoma caninum (Fabricius)

LIST OF DIPTERA PRESENT IN TRAP 13 ON 9TH AUGUST

Limoniidae

Limonia nubeculosa Meigen 1♀

Chironomidae

1 specimen (not determined)

Mycetophilidae

Acnemia nitidicollis (Meigen) 2♂
Synapha vitripennis (Meigen) 1♂

Sciaridae

undetermined Sciaridae 1

Cecidomyiidae

5 specimens

Stratiomyidae

Chorisops nagatomii Rozkošny 1♀

Asilidae

Dioctria linearis (Fabricius) 1♂, 1♀

Hybotidae

Drapetis (D.) parilis Collin 2♀

Empididae

Empis livida Linnaeus 1♀

Dolichopodidae

Chrysotimus concinnus (Zetterstedt) 1♂
Sympycnus aeneicoxa (Meigen) 1♀
Argyra argentina (Meigen) 1♀
A. confinis (Zetterstedt) 1♀
Dolichopus griseipennis Stannius 1♂
D. wahlbergi Zetterstedt 1♂

Phoridae

Borophaga incrassata (Meigen) 1♂
Diplonevra concinna (Meigen) 5♂
D. nitidula (Meigen) 15♂, 1♀
D. pilosella Schmitz 1♂
Megaselia species (not determined) 19♂, 29♀

TRAP 13, 9th August

Phora species females (not determined) 2♀

Spiniphora bergenstammi (Mik) 1♂

Triphleba nudipalpis (Becker) 1♂

Syrphidae

Episyrrhus balteatus (De Geer) 4♂, 3♀

Melanostoma scalare (Fabricius) 1♂, 1♀

Lauxaniidae

Sapromyza sexpunctata Meigen 1♀

Tricholauxania praeusta (Fallén) 2♀

Lyciella decempunctata (Fallén) 1♂

L. rorida (Fallén) 1♀

Psilidae

Chyliza leptogaster (Panzer) (= *scutellata* (Fabricius)) 1♀

Clusiidae

Clusia flava (Meigen) 1♀

Heleomyzidae

Suillia variegata (Loew) 1♂

Sphaeroceridae

Opacifrons humida (Haliday) 1♀

Pullimosina moesta (Villeneuve) 7♂, 3♀

Spelobia palmata (Richards) 1♀

Scathophagidae

Scathophaga stercoraria (Linnaeus) 2♂

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila fugax (Meigen) 5♂

Botanophila or *Delia* females (not determined) 6♀

Emmesomyia socia (Fallén) (= *villica* Meigen) 1♀

Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 2♂, 3♀

Pegoplatia nitidicauda (Schnabl) (= *virginea* auctt.) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 8♀

Musca autumnalis De Geer 1♀

Phaonia angelicae (Scopoli) (= *basalis* (Zetterstedt)) 2♀

P. valida (Harris) (= *viarum* Robineau-Desvoidy) 1♂, 1♀

Coenosia albicornis Meigen (= *lineatipes* (Zetterstedt)) 1♂, 1♀

TRAP 13, 9th August

Fanniidae

Piezura graminicola (Zetterstedt) 1♀
Fannia females (not determined) 25♀

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga species females 1♀

LIST OF DIPTERA PRESENT IN TRAP 13 ON 12TH AUGUST

Limoniidae

Limonia nubeculosa Meigen 1♂

Mycetophilidae

Acnemia nitidicollis (Meigen) 2♂

Cecidomyiidae

1 specimen

Rhagionidae

Rhagio lineolus Fabricius 1♀

Hybotidae

Platypalpus pectoralis (Fallén) 1♀

Drapetis (Elaphropeza) ephippiata (Fallén) 1♀

Dolichopodidae

Chrysotimus concinnus (Zetterstedt) 1♀

Phoridae

Borophaga incrassata (Meigen) 1♂

Conicera species 2♀

Diplonevra nitidula (Meigen) 9♂, 1♀

D. pilosella Schmitz 1♂

Gymnophora arcuata (Meigen) 1♂

Megaselia species (not determined) 20♂, 10♀

Metopina galeata (Haliday) 1♀

Phora atra (Meigen) 2♂

Triphleba nudipalpis (Becker) 1♀

Dryomyzidae

Dryomyza analis (Fallén) (= *anilis* auctt.) 1♂

Lauxaniidae

Sapromyza sexpunctata Meigen 1♀

Opomyzidae

Opomyza germinationis (Linnaeus) 1♀

Heleomyzidae

Suillia variegata (Loew) 2♀

TRAP 13, 12th August

Drosophilidae

Drosophila phalerata Meigen 1♂, 1♀
D. subobscura Collin in Gordon 2♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila or *Delia* females (not determined) 4♀
Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 1♂

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 1♀
Helina depuncta (Fallén) 1♀
Coenosia agromyzina (Fallén) 1♀

Fanniidae

Fannia pallitibia (Rondani) 1♂, 1♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Lucilia ampullacea Villeneuve 1♂

LIST OF DIPTERA PRESENT IN TRAP 13 ON 18TH AUGUST

Keroplatidae

Neoplatyura modesta (Winnertz) 1♂

Mycetophilidae

Acnemia nitidicollis (Meigen) 3♂, 1♀

Zygomyia pictipennis (Staeger) 1♀

Sciaridae

Trichosia (T.) splendens Winnertz 1♂

Cecidomyiidae

1 specimen

Hybotidae

Crossopalpus minimus (Meigen) 1♂

Dolichopodidae

Bathycranium bicolorellum (Zetterstedt) 1♀

Medetera truncorum Meigen 1♂

Phoridae

Borophaga incrassata (Meigen) 1♂

Conicera floricola Schmitz 1♂

Diplonevra concinna (Meigen) 1♂

D. *nitidula* (Meigen) 8♂, 3♀

D. *pilosella* Schmitz 1♂

Megaselia species (not determined) 3♂, 8♀

Phora species females (not determined) 2♀

Syrphidae

Baccha elongata (Fabricius) sensu lato 1♀

Pallopteridae

Palloptera ustulata Fallén 1♀

Dryomyzidae

Dryomyza analis (Fallén) (= *anilis* auctt.) 1♀

Lauxaniidae

Sapromyza sordida Haliday 1♀

Tricholauxania praeusta (Fallén) 1♀

TRAP 13, 18th August

Opomyzidae

Opomyza germinationis (Linnaeus) 1♀

Sepsidae

Nemopoda nitidula (Fallén) 1♂

Heleomyzidae

Suillia affinis (Meigen) 2♀

S. variegata (Loew) 1♂, 2♀

Sphaeroceridae

Pullimosina moesta (Villeneuve) 1♀

Spelobia palmata (Richards) 2♂

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Emmesomyia socia (Fallén) (= *villica* Meigen) 2♀

Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 4♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Azelia species 1♀

Phaonia valida (Harris) (= *viarum* Robineau-Desvoidy) 1♀

Fanniidae

Fannia females (not determined) 3♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Lucilia ampullacea Villeneuve 1♂, 1♀

LIST OF DIPTERA PRESENT IN TRAP 13 ON 23RD AUGUST

Psychodidae

1 specimen

Mycetophilidae

Monoclona rufilatera (Walker) 1♂
Acnemia nitidicollis (Meigen) 4♂
Apolephthisa subincana (Curtis) 1♂
Sceptonia membranacea Edwards 1♂

Sciaridae

Trichosia (Leptosciarella) glabra (Meigen) 1♂

Hybotidae

Hybos culiciformis (Fabricius) 1♀
Drapetis (D.) parilis Collin 1♀

Phoridae

Borophaga incrassata (Meigen) 1♀
Diplonevra concinna (Meigen) 1♂
D. *nitidula* (Meigen) 16♂, 4♀
D. *pilosella* Schmitz 5♂
Megaselia species (not determined) 11♂, 14♀
Phora species females (not determined) 2♀
Spiniphora bergenstammi (Mik) 1♂

Pipunculidae

Cephalops semifumosus (Kowarz) 1♀

Pallopteridae

Palloptera ustulata Fallén 1♀

Sciomyzidae

Trypetoptera punctulata (Scopoli) 1♂, 1♀

Sepsidae

Sepsis cynipsea (Linnaeus) 1♂

Heleomyzidae

Suillia variegata (Loew) 1♂, 2♀

Drosophilidae

Drosophila phalerata Meigen 1♂

TRAP 13, 23rd August

Sphaeroceridae

Opacifrons humida (Haliday) 1♀
Spelobia palmata (Richards) 1♂, 1♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Emmesomyia socia (Fallén) (= *villica* Meigen) 5♀
Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 1♀
Pegomya calyptrata (Zetterstedt) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 2♀
Polietes lardarius (Fabricius) 1♂
Phaonia angelicae (Scopoli) (= *basalis* (Zetterstedt)) 1♀
P. valida (Harris) (= *viarum* Robineau-Desvoidy) 1♀
Helina depuncta (Fallén) 4♀
Mydaea humeralis Robineau-Desvoidy (= *tincta* (Zetterstedt)) 2♀
Coenosia agromyzina (Fallén) 3♀

Fanniidae

Fannia females (not determined) 3♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Lucilia caesar (Linnaeus) 1♂

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga species females 1♀

LIST OF DIPTERA PRESENT IN TRAP 13 ON 26TH AUGUST

Limoniidae

Molophilus appendiculatus (Staeger) 1♂

Mycetophilidae

Trichonta vitta (Meigen) 1♀

Hybotidae

Drapetis (D.) parilis Collin 1♀

Phoridae

Diplonevra nitidula (Meigen) 5♂, 3♀

Megaselia species (not determined) 6♂

Triphleba nudipalpis (Becker) 1♂

Heleomyzidae

Suillia variegata (Loew) 2♀

Sphaeroceridae

Spelobia palmata (Richards) 1♂, 1♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Emmesomyia socia (Fallén) (= *villica* Meigen) 2♀

Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 2♀

Mycophaga testacea (Gimmerthal) 1♂

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Helina depuncta (Fallén) 2♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Calliphora vicina Robineau-Desvoidy 1♀

Lucilia caesar (Linnaeus) 1♀

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga species females 1♀

Tachinidae (determined from and following Belshaw, RES Handbook)

Dexiosoma caninum (Fabricius) 1♀

LIST OF DIPTERA PRESENT IN TRAP 13 ON 30TH AUGUST

Psychodidae

1 specimen

Bibionidae

Dilophus febrilis (Linnaeus) 1♂

Keroplatidae

Macrocerata stigmoides Edwards 1♀
Neoplatyura modesta (Winnertz) 1♂

Mycetophilidae

Monoclona rufilatera (Walker) 2♂
Acnemia nitidicollis (Meigen) 2♂
Synapha vitripennis (Meigen) 1♂
Apolephthisa subincana (Curtis) 1♀
Rondaniella dimidiata (Meigen) 1♀

Sciaridae

Trichosia (Leptosciarella) pilosa (Staeger) 1♂
Phytosciara flavipes (Meigen) 1♂
undetermined Sciaridae 3♀

Cecidomyiidae

4 specimens

Hybotidae

Crossopalpus minimus (Meigen) 1♀

Empididae

Rhamphomyia erythrophthalma Meigen
(form *hirsutipes* Collin) 1♂

Dolichopodidae

Sympycnus aeneicoxa (Meigen) 1♀
Medetera abstrusa Thuneberg 1♀

Phoridae

Borophaga incrassata (Meigen) 1♂
Diplonevra nitidula (Meigen) 13♂, 1♀
D. pilosella Schmitz 6♂
Diplonevra species females (not determined) 1♀
Megaselia species (not determined) 18♂, 11♀
Phora atra (Meigen) 1♂

TRAP 13, 30th August

Spiniphora bergenstammi (Mik) 1♀
Triphleba distinguenda (Strobl) 1♂
T. nudipalpis (Becker) 4♂

Pipunculidae

Chalarus species (not determined) 1♀

Syrphidae

Baccha elongata (Fabricius) sensu lato 1♀

Dryomyzidae

Dryomyza analis (Fallén) (= *anilis* auctt.) 1♂

Lauxaniidae

Lyciella rorida (Fallén) 1♀

Psiliidae

Psilosoma (= *Camptopsila*) *lefebvrei* (Zetterstedt) 1♀

Heleomyzidae

Suillia variegata (Loew) 1♂, 1♀

Sphaeroceridae

Chaetopodella scutellaris (Haliday) 1♂
Spelobia palmata (Richards) 4♂, 2♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila or *Delia* females (not determined) 2♀
Emmesomyia socia (Fallén) (= *villica* Meigen) 5♀
Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 11♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea cyrtoneurina (Zetterstedt) 1♀
H. irritans (Fallén) 1♀
Phaonia valida (Harris) (= *viarum* Robineau-Desvoidy) 1♀
Helina depuncta (Fallén) 3♀

Fanniidae

Fannia females (not determined) 2♀

TRAP 13, 30th August

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga carnaria (Linnaeus) (= *schulzi* Muller, var. *vulgaris* Rohdendorf of van Emden) 1♂
Sarcophaga species females 1♀

LIST OF DIPTERA PRESENT IN TRAP 13 ON 2ND SEPTEMBER

Keroplatidae

Macrocera stigmoides Edwards 1♀

Mycetophilidae

Zygomyia humeralis (Wiedemann) 1♂

Sciaridae

undetermined Sciaridae 4

Empididae

Rhamphomyia erythrophthalma Meigen (typical) 1♂

Dolichopodidae

Dolichopus wahlbergi Zetterstedt 1♀

Phoridae

Diplonevra concinna (Meigen) 1♂

D. nitidula (Meigen) 3♂

Megaselia species (not determined) 3♂

Triphleba nudipalpis (Becker) 1♀

Drosophilidae

Scaptomyza (Parascaptomyza) pallida (Zetterstedt) 1♀

Drosophila kuntzei Duda 1♀

Sphaeroceridae

Spelobia palmata (Richards) 1♂

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Emmesomyia socia (Fallén) (= *villica* Meigen) 2♀

Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 1♀

Pegoplata nitidicauda (Schnabl) (= *virginea* auctt.) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 1♀

Phaonia errans (Meigen) 1♀

Helina depuncta (Fallén) 2♀

Mydaea nebulosa (Stein) 1♀

LIST OF DIPTERA PRESENT IN TRAP 13 ON 6TH SEPTEMBER

Psychodidae

1 specimen

Mycetophilidae

Monoclonia rufilatera (Walker) 1♂
Acnemia nitidicollis (Meigen) 1♂
Sceptonia tenuis Edwards 1♂

Sciaridae

undetermined Sciaridae 1

Hybotidae

Drapetis (D.) parilis Collin 1♂, 2♀

Phoridae

Diplonevra concinna (Meigen) 1♂
D. nitidula (Meigen) 8♂
D. pilosella Schmitz 5♂
Diplonevra species females (not determined) 1♀
Megaselia species (not determined) 3♂, 5♀

Syrphidae

Melanostoma scalare (Fabricius) 1♀

Lauxaniidae

Lyciella rorida (Fallén) 1♀

Opomyzidae

Opomyza germinationis (Linnaeus) 1♀

Heleomyzidae

Suillia variegata (Loew) 1♂

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila or *Delia* females (not determined) 1♀
Emmesomyia socia (Fallén) (= *villica* Meigen) 2♀
Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 1♂, 2♀
Mycophaga testacea (Gimmerthal) 2♀
Pegoplata nitidicauda (Schnabl) (= *virginea* auctt.) 1♀
Pegomya winthemi (Meigen) 1♀

TRAP 13, 6th September

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Phaonia rufiventris (Scopoli) (= *populi* (Meigen)) 1♀

P. valida (Harris) (= *viarum* Robineau-Desvoidy) 1♀

Helina depuncta (Fallén) 3♀

H. impuncta (Fallén) 4♀

Mydaea electa (Zetterstedt) 1♀

M. humeralis Robineau-Desvoidy (= *tincta* (Zetterstedt)) 1♀

Fanniidae

Fannia females (not determined) 2♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Melinda viridicyanea (Robineau-Desvoidy) (= *cognata* Meigen) 1♂

Calliphora vicina Robineau-Desvoidy 1♀

LIST OF DIPTERA PRESENT IN TRAP 13 ON 9TH SEPTEMBER (FIRST TUBE)

Mycetophilidae

Monoclonia rufilatera (Walker) 1♂, 1♀
Acnemia nitidicollis (Meigen) 1♂

Empididae

Rhamphomyia erythrophthalma Meigen 1♀

Phoridae

Diplonevra nitidula (Meigen) 4♂
D. pilosella Schmitz 1♂
Diplonevra species females (not determined) 1♀

Pipunculidae

Eudorylas subfascipes Collin 1♂

Syrphidae

Helophilus pendulus (Linnaeus) 1♂

Dryomyzidae

Dryomyza analis (Fallén) (= *anilis* auctt.) 1♀

Sepsidae

Nemopoda nitidula (Fallén) 1♀

Heleomyzidae

Suillia atricornis (Meigen) 1♂
S. bicolor (Zetterstedt) 1♂
S. notata (Meigen) 1♀

Sphaeroceridae

Spelobia palmata (Richards) 1♂

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila or *Delia* females (not determined) 1♀
Emmesomyia socia (Fallén) (= *villica* Meigen) 2♀
Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 2♀
Hylemyza partita (Meigen) (= *lasciva*) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 1♀
Polietes lardarius (Fabricius) 1♀
Phaonia pallida (Fabricius) 1♀

TRAP 13, 9th September (First Tube)

P. rufiventris (Scopoli) (= *populi* (Meigen)) 1♀

Helina depuncta (Fallén) 1♀

Coenosia mollicula (Fallén) 1♀

Fanniidae

Fannia pallitibia (Rondani) 1♀

Fannia females (not determined) 1♀

LIST OF DIPTERA PRESENT IN TRAP 13 ON 9TH SEPTEMBER (SECOND TUBE)

Limoniidae

Rhipidia maculata Meigen (= *duplicata* auctt.) 1♀

Keroplatidae

Macroceras stigmoides Edwards 1♀

Mycetophilidae

Zygomyia notata (Stannius) 1♂

Platurocypta punctum (Stannius) 1♀

P. testata (Edwards) 1♂

Sciaridae

undetermined Sciaridae 2

Hybotidae

Tachypeza nubila (Meigen) 1♀

Empididae

Rhamphomyia erythrophthalma Meigen (typical) 1♂

Dolichopodidae

Campsicnemus curvipes (Fallén) 1♂

Medetera species 1♀

Phoridae

Diplonevra nitidula (Meigen) 1♂

D. pilosella Schmitz 2♂

Diplonevra species females (not determined) 1♀

Megaselia species (not determined) 2♂, 10♀

Triphleba nudipalpis (Becker) 2♂, 1♀

Pipunculidae

Eudorylas subfascipes Collin 1♂

Lauxaniidae

Lyciella rorida (Fallén) 1♀

Sepsidae

Sepsis cynipsea (Linnaeus) 1♂

S. fulgens Meigen 1♂

S. orthocnemis Frey 1♂

TRAP 13, 9th September (Second Tube)

Sepsis species 1♀

Agromyzidae

Liriomyza flaveola (Fallén) 1♂, 2♀

Chloropidae

Elachiptera tuberculifera (Corti) 1♀

Oscinella species (not determined) 1♀

Chlorops adjunctus Becker 1♂

C. hypostigma Meigen 1♀

Scathophagidae

Scathophaga stercoraria (Linnaeus) 3♂, 3♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila or *Delia* females (not determined) 2♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 2♀

Poliates lardarius (Fabricius) 2♂, 2♀

Morellia aenescens Robineau-Desvoidy 1♂

Phaonia valida (Harris) (= *viarum* Robineau-Desvoidy) 1♀

Helina depuncta (Fallén) 1♀

H. impuncta (Fallén) 4♀

Coenosia albicornis Meigen (= *lineatipes* (Zetterstedt)) 1♀

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga carnaria (Linnaeus) (= *schulzi* Muller, var. *vulgaris* Rohdendorf of van Emden) 1♂

LIST OF DIPTERA PRESENT IN TRAP 18 (all species)

Tipulidae

Tipula oleracea Linnaeus
T. paludosa Meigen

Limoniidae

Symplecta stictica (Meigen)
Dicranomyia mitis (Meigen) (form *lutea*)
Limonia nubeculosa Meigen
Neolimonia dumetorum (Meigen)
Rhipidia maculata Meigen (= *duplicata* auctt.)

Psychodidae

Culicidae

Culex pipiens Linnaeus

Chironomidae

Ceratopogonidae

Forcipomyia species (not determined)

Bibionidae

Dilophus febrilis (Linnaeus)

Scatopsidae

Swammerdamella brevicornis (Meigen)
Colobostema triste, (Zetterstedt)

Keroplatidae

Macrocerca anglica Edwards
Neoplatyura modesta (Winnertz)
N. nigricauda (Strobl)

Mycetophilidae

Monoclonia rufilatera (Walker)
Acnemia nitidicollis (Meigen)
Sciophila species (undetermined female)
Leia cylindrica (Winnertz)
Docosia fumosa Edwards
Cordyla crassicornis Meigen
C. murina Winnertz Group species B

TRAP 18, all species

Brevicornu fissicauda (Lundström)
Exechia species (female of *repanda* group)
Trichonta terminalis (Walker)
Phronia conformis (Walker)
Phronia species females (not determined)
Mycetophila cingulum Meigen
M. *gibbula* Edwards
Zygomyia notata (Stannius)
Z. *pictipennis* (Staeger)
Zygomyia species females (not determined)
Sceptonia cryptocauda Chandler
S. *nigra* (Meigen)

Sciaridae

Trichosia (T.) caudata (Walker)
T. (Leptosciarella) pilosa (Staeger)
Schwenkfeldina carbonaria (Meigen)
Plastosciara brachyptera (Kieffer)
Phytosciara flavipes (Meigen)
undetermined Sciaridae

Cecidomyiidae

Stratiomyidae

Chorisops nagatomii Rozkošny

Asilidae

Dioctria linearis (Fabricius)

Hybotidae

Leptopeza flavipes (Meigen)
Hybos culiciformis (Fabricius)
Platypalpus annulipes (Meigen)
P. *longicornis* (Meigen)
P. *longiseta* (Zetterstedt)
P. *luteus* (Meigen)
P. *optivus* (Collin)
P. *pallipes* (Fallén)
Tachypeza nubila (Meigen)
Drapetis (D.) assimilis (Fallén)
D. *(D.) parilis* Collin
D. *(D.) pusilla* Loew
D. (Elaphropeza) ephippiata (Fallén)

Empididae

Empis livida Linnaeus
Rhamphomyia erythrophthalma Meigen

TRAP 18, all species

Trichopeza longicornis (Meigen)

Dolichopodidae

Anepsiomyia flaviventris (Meigen)

Sympycnus aeneicoxa (Meigen)

Systemus scholtzii (Loew)

Campsicnemus curvipes (Fallén)

Argyra argentina (Meigen)

A. leucocephala (Meigen)

Chrysotus species (females of *gramineus* group)

Dolichopus festivus Haliday

D. griseipennis Stannius

D. plumipes (Scopoli)

D. trivialis Haliday

D. wahlbergi Zetterstedt

Medetera abstrusa Thuneberg

M. impigra (Fallén)

M. jacula (Fallén)

M. pallipes (Zetterstedt)

M. truncorum Meigen

Lonchopteridae

Lonchoptera lutea Panzer

Phoridae

Borophaga incrassata (Meigen)

Conicera floricola Schmitz

C. similis (Haliday)

Diplonevra concinna (Meigen)

D. florea (Fabricius)

D. funebris (Meigen)

D. nitidula (Meigen)

D. pilosella Schmitz

Diplonevra species females (not determined)

Megaselia species (not determined)

Metopina galeata (Haliday)

M. heselhausi Schmitz

M. oligoneura (Mik)

Phalacrotophora fasciata (Fallén)

Phora atra (Meigen)

P. holosericea Schmitz

Phora species females (not determined)

Pseudacteon formicarum (Verrall)

Spiniphora bergenstammi (Mik)

Triphleba distinguenda (Strobl)

T. nudipalpis (Becker)

Pipunculidae

Chalarus species (not determined)

TRAP 18, all species

Cephalops obtusinervis (Zetterstedt)

C. semifumosus (Kowarz)

C. ultimus (Becker)

Eudorylas subfascipes Collin

Tomosvaryella kuthyi (Aczél)

Syrphidae

Syrphus ribesii (Linnaeus)

Episyrrhus balteatus (De Geer)

Epeodes corollae (Fabricius)

E. latifasciatus (Macquart)

Sphaerophoria species females (not determined)

Baccha elongata (Fabricius) sensu lato

Melanostoma mellinum (Linnaeus)

M. scalare (Fabricius)

Platycheirus albimanus (Fabricius)

P. peltatus (Meigen)

P. scutatus (Meigen)

Cheilosia intonsa Loew

C. pagana (Meigen)

Eumerus strigatus (Fallén)

Eristalis arbustorum (Linnaeus)

E. pertinax (Scopoli)

Helophilus pendulus (Linnaeus)

Tephritidae

Myoleja caesio (Harris)

Phagocarpus purmundus (Harris)

Tephritis formosa (Loew)

Pallopteridae

Palloptera modesta (Meigen) (= *parallela* Loew)

P. umbellatarum (Fabricius)

P. ustulata Fallén

Dryomyzidae

Dryomyza analis (Fallén) (= *anilis* auctt.)

Sciomyzidae

Trypetoptera punctulata (Scopoli)

Lauxaniidae

Minettia rivosa (Meigen)

Sapromyza sexpunctata Meigen

Tricholauxania praeusta (Fallén)

Lyciella rorida (Fallén)

TRAP 18, all species

L. subfasciata (Zetterstedt)

Calliopum aeneum (Fallén)

Psilidae

Psila rosae (Fabricius) group females

Opomyzidae

Geomysa tripunctata Fallén

Opomyza florom (Fabricius)

O. germinationis (Linnaeus)

Lonchaeidae

Lonchaea laticornis Meigen

Clusiidae

Clusiodes species ♀

Sepsidae

Themira annulipes (Meigen)

Sepsis fulgens Meigen

S. orthocnemis Frey

S. punctum (Fabricius)

Heleomyzidae

Suillia affinis (Meigen)

S. fuscicornis (Zetterstedt)

S. variegata (Loew)

Trixoscelididae

Trixoscelis frontalis sensu Hackman (= *canescens* of Collin)

Asteiidae

Asteia concinna Meigen

Camillidae

Camilla flavicauda Duda (= *glabrata* Collin)

Drosophilidae

Amiota alboguttata (Wahlberg) (sensu Maça)

Scaptomyza (S.) flava (Fallén)

S. (Parascaptomyza) pallida (Zetterstedt)

Drosophila andalusiaca Strobl

TRAP 18, all species

- D. *cameraria* Haliday
D. *fenestrarum* Fallén
D. *subobscura* Collin in Gordon

Campichoetidae

Campichoeta punctum (Meigen)

Ephydriidae

- Coenia* species female
Limnellia quadrata (Fallén)
Philygria stictica (Meigen)
Trimerina madizans (Fallén)

Sphaeroceridae

- Chaetopodella scutellaris* (Haliday)
Opacifrons coxata (Stenhammar)
O. *humida* (Haliday)
O. *septentrionalis* (Stenhammar)
Minilimosina vitripennis (Zetterstedt)
Pullimosina pullula (Zetterstedt)
Spelobia palmata (Richards)

Agromyzidae

- Agromyza mobilis* Meigen
Liriomyza flaveola (Fallén)
Napomyza hirticornis (Hendel)
Phytomyza crassiseta Zetterstedt
Cerodontha (C.) denticornis (Panzer)
C. (*Poemyza*) *atra* (Meigen)
C. (*Dizygomyza*) *luctuosa* (Meigen)

Chloropidae

- Tricimba cincta* (Meigen)
Gaurax fascipes (Becker)
Elachiptera tuberculifera (Corti)
Oscinella species (not determined)
Chlorops hypostigma Meigen
Meromyza bohemica Fedoseeva

Scathophagidae

- Scathophaga furcata* (Say)
S. *stercoraria* (Linnaeus)

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

- Anthomyia* species female
Botanophila fugax (Meigen)

TRAP 18, all species

- B. *striolata* (Fallén)
Botanophila or *Delia* females (not determined)
Delia platura (Meigen) (= *cilicrura*)
D. *florilega* (Zetterstedt) (= *trichodactyla*)
Emmesomyia socia (Fallén) (= *villica* Meigen)
Hylemya urbica (van der Wulp) (= *latifrons* Schnabl)
H. *vagans* (Panzer) (= *strenua* Robineau-Desvoidy)
H. *variata* (Fallén)
Hylemyza partita (Meigen) (= *lasciva*)
Mycophaga testacea (Gimmerthal)
Pegoplata nitidicauda (Schnabl) (= *virginea* auctt.)
Pegomya bicolor (Wiedemann)
P. *caesia* Stein
P. *calyprata* (Zetterstedt)

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

- Muscina prolapsa* (Harris) (= *pabulorum* (Fallén))
Hydrotaea albipuncta (Zetterstedt)
H. *armipes* (Fallén)
H. *irritans* (Fallén)
H. *meteorica* (Linnaeus)
Mesembrina meridiana (Linnaeus)
Polites lardarius (Fabricius)
Musca autumnalis De Geer
Morellia aenescens Robineau-Desvoidy
Neomyia (= *Orthellia*) *cornicina* (Fabricius) (= *caesarion* (Meigen))
N. *viridescens* (Robineau-Desvoidy) (= *cornicina* auctt.)
Eudasyphora (= *Dasyphora*) *cyanella* (Meigen)
Phaonia angelicae (Scopoli) (= *basalis* (Zetterstedt))
P. *errans* (Meigen)
P. *mystica* (Meigen) (= *vittifera* (Zetterstedt))
P. *pallida* (Fabricius)
P. *rufiventris* (Scopoli) (= *populi* (Meigen))
P. *subventá* (Harris) (= *variegata* (Meigen))
P. *tuguriorum* (Scopoli) (= *signata* (Meigen))
P. *valida* (Harris) (= *viarum* Robineau-Desvoidy)
Helina abdominalis (Zetterstedt)
H. *depuncta* (Fallén)
H. *impuncta* (Fallén)
H. *lasiophthalma* (Macquart)
H. *quadrum* (Fabricius)
H. *reversio* (Harris) (= *duplicata* (Meigen))
Mydaea ancilla (Meigen)
M. *urbana* (Meigen)
Myospila meditabunda (Fabricius)
Hebecnema umbratica (Meigen)
H. *vespertina* (Fallén) (= *affinis* Malloch)
Graphomya maculata (Scopoli)
Coenosia agromyzina (Fallén)
C. *albicornis* Meigen (= *lineatipes* (Zetterstedt))
C. *infantula* Rondani
C. *mollicula* (Fallén)

TRAP 18, all species

- C. *testacea* Robineau-Desvoidy (= *tricolor* (Zetterstedt))
C. *tigrina* (Fabricius)

Fanniidae

- Piezura graminicola* (Zetterstedt)
Fannia genualis (Stein)
F. *pallitibia* (Rondani)
F. *parva* (Stein)
F. *serena* (Fallén)
Fannia females (not determined)

Rhinophoridae

- Paykullia maculata* (Fallén)
Rhinophora lepida (Meigen)

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

- Melanomya nana* (Meigen)
Bellardia viarum (Robineau-Desvoidy) (= *pusilla* auctt., *aculeata* (Pandellé))
Melinda viridicyanea (Robineau-Desvoidy) (= *cognata* Meigen)
Calliphora vicina Robineau-Desvoidy
Lucilia ampullacea Villeneuve
L. *caesar* (Linnaeus)
L. *sericata* (Meigen)
L. *silvarum* (Meigen)
Pollenia angustigena Wainwright
P. *pediculata* Macquart (= *pseudorudis* Rognes)

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

- Helicophagella agnata* (Rondani)
Heteronychia haemorrhao Meigen
Parasarcophaga caerulescens (Zetterstedt) (= *scoparia* (Pandellé))
Sarcophaga carnaria (Linnaeus) (= *schulzi* Muller, var. *vulgaris* Rohdendorf of van Emden)
S. *subvicina* Rohdendorf
S. *variegata* (Scopoli) (= *carnaria* auctt., typical form of van Emden)
Sarcophaga species females

Tachinidae (determined from and following Belshaw, RES Handbook)

- Ligeria angusticornis* (Loew)
Phryxe nemea (Meigen)
Pales pavia (Meigen)
Macquartia tenebricosa (Meigen)
Actia lamia (Meigen)
A. *pilipennis* (Fallén)
Siphona cristata (Fabricius)
S. *geniculata* (De Geer)
S. *maculata* Staeger

LIST OF DIPTERA PRESENT IN TRAP 18 ON 9TH AUGUST (FIRST TUBE)

Limoniidae

Symplecta stictica (Meigen) 1♂
Limonia nubeculosa Meigen 1♀
Rhipidia maculata Meigen (= *duplicata* auctt.) 1♀

Ceratopogonidae

Forcipomyia species (not determined) 1♀

Scatopsidae

Colobostema triste (Zetterstedt) 2♂

Keroplatidae

Macrocerata anglica Edwards 1♂
Neoplatyura modesta (Winnertz) 1♂

Mycetophilidae

Acnemia nitidicollis (Meigen) 1♂
Phronia species females (not determined) 1♀
Mycetophila gibbula Edwards 1♂
Sceptonia cryptocauda Chandler 1♂

Sciaridae

undetermined Sciaridae 9

Cecidomyiidae

24 specimens

Hybotidae

Hybos culiciformis (Fabricius) 12♂, 2♀
Platypalpus longiseta (Zetterstedt) 2♂, 6♀
P. luteus (Meigen) 1♀
P. optivus (Collin) 1♂
Tachypeza nubila (Meigen) 1♀
Drapetis (D.) *pusilla* Loew 1♂, 1♀
D. (Elaphropeza) ephippiata (Fallén) 2♂, 2♀

Dolichopodidae

Anepsiomyia flaviventris (Meigen) 1♂
Sympycnus aeoneicoxa (Meigen) 1♀
Argyra leucocephala (Meigen) 1♀
Chrysotus species (females of *gramineus* group) 42♀
Dolichopus festivus Haliday 2♂, 2♀
D. griseipennis Stannius 1♂
Medetera pallipes (Zetterstedt) 1♂, 3♀

TRAP 18, 9th August (First Tube)

M. truncorum Meigen 3♂, 3♀

Lonchopteridae

Lonchoptera lutea Panzer 1♀

Phoridae

Borophaga incrassata (Meigen) 4♀

Conicera floricola Schmitz 1♂

Diplonevra funebris (Meigen) 1♂

D. nitidula (Meigen) 13♂

D. pilosella Schmitz 13♂

Diplonevra species females (not determined) 4♀

Megaselia species (not determined) 79♂, 55♀

Metopina galeata (Haliday) 1♀

M. oligoneura (Mik) 1♀

Phalacrotophora fasciata (Fallén) 3♂, 3♀

Phora species females (not determined) 4♀

Pseudacteon formicarum (Verrall) 3♂, 1♀

Spiniphora bergenstammi (Mik) 1♂

Triphleba distinguenda (Strobl) 2♂, 1♀

T. nudipalpis (Becker) 45♂

Pipunculidae

Chalarus species (not determined) 1♂, 2♀

Cephalops semifumosus (Kowarz) 1♂, 1♀

Syrphidae

Episyrphus balteatus (De Geer) 10♂, 10♀

Epeodes corollae (Fabricius) 1♀

E. latifasciatus (Macquart) 1♂

Melanostoma scalare (Fabricius) 2♂, 2♀

Platycheirus peltatus (Meigen) 2♂, 1♀

P. scutatus (Meigen) 1♀

Cheilosia pagana (Meigen) 3♀

Eumerus strigatus (Fallén) 1♀

Eristalis pertinax (Scopoli) 3♀

Tephritidae

Myoleja caesio (Harris) 2♀

Pallopteridae

Palloptera modesta (Meigen) (= *parallela* Loew) 1♀

P. umbellatarum (Fabricius) 1♂, 2♀

P. ustulata Fallén 1♂, 8♀

TRAP 18, 9th August (First Tube)

Lauxaniidae

Minettia rivosa (Meigen) 1♂
Tricholauxania praeusta (Fallén) 2♀
Lyciella rorida (Fallén) 2♀
L. *subfasciata* (Zetterstedt) 1♂

Opomyzidae

Opomyza florum (Fabricius) 1♀

Heleomyzidae

Suillia affinis (Meigen) 1♀

Trixoscelididae

Trixoscelis frontalis sensu Hackman (= *canescens* of Collin) 1♂

Asteiidae

Asteia concinna Meigen 1♂

Camillidae

Camilla flavicauda Duda (= *glabrata* Collin) 2♂, 1♀

Drosophilidae

Scaptomyza (Parascaptomyza) pallida (Zetterstedt) 8♀
Drosophila fenestrarum Fallén 1♂
D. *subobscura* Collin in Gordon 1♀

Campichoetidae

Campichoeta punctum (Meigen) 2♀

Sphaeroceridae

Chaetopodella scutellaris (Haliday) 5♂, 3♀
Spelobia palmata (Richards) 1♂, 1♀

Agromyzidae

Agromyza mobilis Meigen 1♂
Liriomyza flaveola (Fallén) 1♂, 5♀
Phytomyza crassiseta Zetterstedt 1♀
Phytomyza species 2♀
Cerodontha (Poemyza) atra (Meigen) 4♂, 8♀

Chloropidae

Tricimba cincta (Meigen) 1♀

TRAP 18, 9th August (First Tube)

Gaurax fascipes (Becker) 2♀

Oscinella species (not determined) 26♂, 25♀

Meromyza bohemica Fedoseeva 1♂

Scathophagidae

Scathophaga stercoraria (Linnaeus) 1♂, 1♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Anthomyia species female 1♀

Botanophila fugax (Meigen) 8♂

Botanophila or *Delia* females (not determined) 41♀

Delia platura (Meigen) (= *cilicrura*) 2♂

D. florilega (Zetterstedt) (= *trichodactyla*) 2♂

Emmesomyia socia (Fallén) (= *villica* Meigen) 2♀

Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 2♀

Pegopelta nitidicauda (Schnabl) (= *virginea* auctt.) 1♀

Pegomya caesia Stein 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 35♀

Polites lardarius (Fabricius) 1♀

Musca autumnalis De Geer 3♂, 3♀

Morellia aenescens Robineau-Desvoidy 2♂, 1♀

Eudasypheora (= *Dasyphora*) *cyanella* (Meigen) 2♂

Phaonia angelicae (Scopoli) (= *basalis* (Zetterstedt)) 3♀

P. errans (Meigen) 1♂

P. subventa (Harris) (= *variegata* (Meigen)) 1♂

P. valida (Harris) (= *viarum* Robineau-Desvoidy) 1♂, 2♀

Helina abdominalis (Zetterstedt) 2♀

H. reversio (Harris) (= *duplicata* (Meigen)) 1♀

Mydaea urbana (Meigen) 1♀

Myospila meditabunda (Fabricius) 1♂

Coenosia testacea Robineau-Desvoidy (= *tricolor* (Zetterstedt)) 2♂

Fanniidae

Fannia pallitibia (Rondani) 2♂

F. parva (Stein) 1♂

Fannia females (not determined) 24♀

Rhinophoridae

Rhinophora lepida (Meigen) 1♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Melanomya nana (Meigen) 2♂, 5♀

Bellardia viarum (Robineau-Desvoidy) (= *pusilla* auctt., *aculeata* (Pandellé)) 2♂

Melinda viridicyanea (Robineau-Desvoidy) (= *cognata* Meigen) 1♂

Lucilia ampullacea Villeneuve 1♀

TRAP 18, 9th August (First Tube)

L. silvarum (Meigen) 1♀

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Heteronychia haemorrhoa Meigen 1♂, 1♀

Sarcophaga subvicina Rohdendorf 1♂

Sarcophaga species females 2♀

Tachinidae (determined from and following Belshaw, RES Handbook)

Siphona maculata Staeger 1♂

LIST OF DIPTERA PRESENT IN TRAP 18 ON 9TH AUGUST (SECOND TUBE)

Limoniidae

Dicranomyia mitis (Meigen) (form *lutea*) 1♂
Neolimonia dumetorum (Meigen) 1♀
Rhipidia maculata Meigen (= *duplicata* auctt.) 1♀

Psychodidae

3 specimens (not determined)

Chironomidae

1 specimen (not determined)

Ceratopogonidae

Forcipomyia species (not determined) 1♀

Scatopsidae

Swammerdamella brevicornis (Meigen) 1♂

Mycetophilidae

Acnemia nitidicollis (Meigen) 1♂
Trichonta terminalis (Walker) 1♂

Sciaridae

undetermined Sciaridae 6

Cecidomyiidae

17 specimens

Asilidae

Dioctria linearis (Fabricius) 1♂

Hybotidae

Hybos culiciformis (Fabricius) 3♂, 5♀
Platypalpus annulipes (Meigen) 1♀
P. *longiseta* (Zetterstedt) 1♂, 1♀
P. *pallipes* (Fallén) 1♀
Tachypeza nubila (Meigen) 1♂
D. (*Elaphropeza*) *ephippiata* (Fallén) 1♂

Empididae

Empis livida Linnaeus 1♂

TRAP 18, 9th August (Second Tube)

Dolichopodidae

Argyra leucocephala (Meigen) 1♀
Chrysotus species (females of *gramineus* group) 13♀
Dolichopus festivus Haliday 1♂
Medetera impigra (Fallén) 3♂, 3♀
M. pallipes (Zetterstedt) 1♂
M. truncorum Meigen 1♂, 3♀

Phoridae

Borophaga incrassata (Meigen) 1♂
Diplonevra concinna (Meigen) 1♂
D. funebris (Meigen) 1♂
D. nitidula (Meigen) 10♂
D. pilosella Schmitz 4♂
Diplonevra species females (not determined) 3♀
Megaselia species (not determined) 40♂, 30♀
Metopina oligoneura (Mik) 1♂, 3♀
Phora atra (Meigen) 1♂
Triphleba distinguenda (Strobl) 1♂
T. nudipalpis (Becker) 34♂, 4♀

Pipunculidae

Chalarus species (not determined) 1♂

Syrphidae

Episyrphus balteatus (De Geer) 8♂, 10♀
Sphaerophoria species females (not determined) 1♀
Melanostoma scalare (Fabricius) 1♂, 4♀
Platycheirus albimanus (Fabricius) 2♂
Eristalis pertinax (Scopoli) 2♂

Tephritidae

Tephritis formosa (Loew) 1♂

Pallopteridae

Palloptera umbellatarum (Fabricius) 1♂, 2♀
P. ustulata Fallén 1♀

Sciomyzidae

Trypetoptera punctulata (Scopoli) 1♂

Lauxaniidae

Sapromyza sexpunctata Meigen 1♂
Tricholauxania praeusta (Fallén) 2♀

TRAP 18, 9th August (Second Tube)

Sepsidae

Themira annulipes (Meigen) 1♂

Sepsis species 1♀

Drosophilidae

Amiota alboguttata (Wahlberg) (sensu Maça) 1♂

Scaptomyza (Parascaptomyza) pallida (Zetterstedt) 2♂, 1♀

Drosophila cameraria Haliday 1♂

D. subobscura Collin in Gordon 2♀

Ephydriidae

Limnella quadrata (Fallén) 1♀

Trimerina madizans (Fallén) 1♂

Sphaeroceridae

Chaetopodella scutellaris (Haliday) 3♂, 3♀

Opacifrons coxata (Stenhammar) 1♂

O. humida (Haliday) 1♀

Agromyzidae

Agromyza mobilis Meigen 2♂, 1♀

Liriomyza flaveola (Fallén) 1♀

Phytomyza crassiseta Zetterstedt 1♀

Phytomyza species 1♀

Cerodontha (Poemyza) atra (Meigen) 4♂, 4♀

C. (Dizygomyza) luctuosa (Meigen) 2♂

Chloropidae

Tricimba cincta (Meigen) 1♂

Gaurax fascipes (Becker) 1♀

Elachiptera tuberculifera (Corti) 1♂

Oscinella species (not determined) 21♂, 17♀

Meromyza species 1♀

Scathophagidae

Scathophaga stercoraria (Linnaeus) 1♂, 1♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila fugax (Meigen) 6♂

Botanophila or *Delia* females (not determined) 28♀

Delia platura (Meigen) (= *cilicrura*) 3♂

Emmesomyia socia (Fallén) (= *villica* Meigen) 4♀

Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 1♀

TRAP 18, 9th August (Second Tube)

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

- Hydrotaea irritans* (Fallén) 41♀
Mesembrina meridiana (Linnaeus) 2♀
Musca autumnalis De Geer 3♀
Morellia aenescens Robineau-Desvoidy 2♀
Neomyia viridescens (Robineau-Desvoidy) (= *cornicina* auctt.) 1♂
Phaonia angelicae (Scopoli) (= *basalis* (Zetterstedt)) 2♀
P. *rufiventris* (Scopoli) (= *populi* (Meigen)) 1♀
P. *tuguriorum* (Scopoli) (= *signata* (Meigen)) 1♂, 1♀
P. *valida* (Harris) (= *viarum* Robineau-Desvoidy) 2♂
Helina depuncta (Fallén) 1♀
H. *impuncta* (Fallén) 1♀
H. *quadrum* (Fabricius) 1♀
Mydaea urbana (Meigen) 1♀
Myospila meditabunda (Fabricius) 1♀
Hebecnema vespertina (Fallén) (= *affinis* Malloch) 1♂
Coenosia albicornis Meigen (= *lineatipes* (Zetterstedt)) 1♂
C. *infantula* Rondani 2♂, 1♀
C. *mollicula* (Fallén) 1♂

Fanniidae

- Fannia genualis* (Stein) 1♂
Fannia females (not determined) 21♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

- Bellardia viarum* (Robineau-Desvoidy) (= *pusilla* auctt., *aculeata* (Pandellé)) 2♂
Lucilia ampullacea Villeneuve 1♀
Pollenia pediculata Macquart (= *pseudorudis* Rognes) 2♂

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

- Heteronychia haemorrhoa* Meigen 1♂
Sarcophaga carnaria (Linnaeus) (= *schulzi* Muller, var. *vulgaris* Rohdendorf of van Emden) 1♂
Sarcophaga species females 2♀

Tachinidae (determined from and following Belshaw, RES Handbook)

- Actia lamia* (Meigen) 1♀
Siphona cristata (Fabricius) 1♂

LIST OF DIPTERA PRESENT IN TRAP 18 ON 12TH AUGUST

Limoniidae

Rhipidia maculata Meigen (= *duplicata* auctt.) 1♀

Psychodidae

2 specimens

Chironomidae

2 specimens

Keroplatidae

Neoplatyura modesta (Winnertz) 1♂

Mycetophilidae

Cordyla murina Winnertz Group species B 1♂
Brevicornu fissicauda (Lundström) 1♂
Exechia species (female of *repanda* group) 1♀
Phronia conformis (Walker) 1♂
Zygomyia species females (not determined) 1♀

Sciaridae

Plastosciara brachyptera (Kieffer) 1♂
Phytosciara flavipes (Meigen) 1♀
undetermined Sciaridae 4

Cecidomyiidae

6 specimens

Hybotidae

Leptopeza flavipes (Meigen) 1♀
Hybos culiciformis (Fabricius) 8♂, 3♀
D. (Elaphropeza) ephippiata (Fallén) 3♀

Empididae

Trichopeza longicornis (Meigen) 1♀

Dolichopodidae

Campsicnemus curvipes (Fallén) 1♂
Argyra leucocephala (Meigen) 1♀
Chrysotus species (females of *gramineus* group) 9♀
Medetera astrusa Thuneberg 1♂
M. pallipes (Zetterstedt) 1♀
M. truncorum Meigen 3♂, 5♀

TRAP 18, 12th August

Phoridae

Borophaga incrassata (Meigen) 1♀
Conicera floricola Schmitz 1♂
C. similis (Haliday) 1♂
Diplonevra nitidula (Meigen) 5♂, 1♀
Diplonevra species females (not determined) 1♀
Megaselia species (not determined) 32♂, 25♀
Phalacrotophora fasciata (Fallén) 1♂
Phora holosericea Schmitz 1♂
Phora species females (not determined) 4♀
Triphleba distinguenda (Strobl) 1♂
T. nudipalpis (Becker) 18♂, 1♀

Pipunculidae

Chalarus species (not determined) 3♀
Cephalops semifumosus (Kowarz) 1♀

Syrphidae

Syrphus ribesii (Linnaeus) 1♀
Episyrphus balteatus (De Geer) 1♂, 2♀
Melanostoma scalare (Fabricius) 5♀
Platycheirus peltatus (Meigen) 1♀
Eristalis arbustorum (Linnaeus) 1♀

Pallopteridae

Palloptera umbellatarum (Fabricius) 1♂, 1♀
P. ustulata Fallén 1♀

Lauxaniidae

Sapromyza sexpunctata Meigen 2♂

Opomyzidae

Opomyza germinationis (Linnaeus) 2♂, 1♀

Clusiidae

Clusiodes species 1♀

Heleomyzidae

Suillia affinis (Meigen) 1♀

Drosophilidae

Amiota alboguttata (Wahlberg) (sensu Maça) 1♀
Scaptomyza (S.) flava (Fallén) 1♂
S. (Parascaptomyza) pallida (Zetterstedt) 2♂, 2♀

TRAP 18, 12th August

Drosophila andalusiaca Strobl 1♀
D. cameraria Haliday 1♀
D. subobscura Collin in Gordon 3♂, 8♀

Ephydriidae

Coenia species female 1♀
Limnellia quadrata (Fallén) 1♂

Sphaeroceridae

Chaetopodella scutellaris (Haliday) 2♂, 2♀
Opacifrons coxata (Stenhammar) 1♀
O. septentrionalis (Stenhammar) 2♂, 2♀

Agromyzidae

Phytomyza species 1♀
Cerodontha (C.) denticornis (Panzer) 1♀

Chloropidae

Oscinella species (not determined) 7♂, 8♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila fugax (Meigen) 2♂
Botanophila or *Delia* females (not determined) 12♀
Emmesomyia socia (Fallén) (= *villica* Meigen) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 5♀
Polietes lardarius (Fabricius) 2♂
Morellia aenescens Robineau-Desvoidy 1♂, 2♀
Phaonia angelicae (Scopoli) (= *basalis* (Zetterstedt)) 1♀
Hebecnema umbratica (Meigen) 1♂, 3♀
Graphomya maculata (Scopoli) 1♂
Coenosia infantula Rondani 2♂, 1♀
C. mollicula (Fallén) 1♂
C. tigrina (Fabricius) 1♂

Fanniidae

Fannia pallitibia (Rondani) 1♀
F. serena (Fallén) 1♂
Fannia females (not determined) 2♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Melanomya nana (Meigen) 1♂
Lucilia ampullacea Villeneuve 1♀

TRAP 18, 12th August

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga subvicina Rohdendorf 1♂

Sarcophaga species females 1♀

Tachinidae (determined from and following Belshaw, RES Handbook)

Ligeria angusticornis (Loew) 1♀

LIST OF DIPTERA PRESENT IN TRAP 18 ON 18TH AUGUST

Keroplatidae

Neoplatyura modesta (Winnertz) 2♂
N. nigricauda (Strobl) 1♂

Mycetophilidae

Acnemia nitidicollis (Meigen) 2♂, 1♀
Cordyla crassicornis Meigen 1♂
Zygomyia notata (Stannius) 1♂
Zygomyia species females (not determined) 1♀

Sciaridae

Trichosia (T.) caudata (Walker) 1♂
T. (Leptosciarella) pilosa (Staeger) 1♂
undetermined Sciaridae 1

Cecidomyiidae

4 specimens

Hybotidae

Hybos culiciformis (Fabricius) 3♂, 1♀
Drapetis (D.) assimilis (Fallén) 1♀

Dolichopodidae

Argyra leucocephala (Meigen) 1♀
Chrysotus species (females of *gramineus* group) 1♀
Medetera jacula (Fallén) 1♂
M. pallipes (Zetterstedt) 1♂, 1♀
M. truncorum Meigen 1♂, 4♀

Phoridae

Borophaga incrassata (Meigen) 1♂
Diplonevra florea (Fabricius) 2♂
D. nitidula (Meigen) 8♂, 1♀
D. pilosella Schmitz 3♂
Megaselia species (not determined) 24♂, 26♀
Metopina galeata (Haliday) 1♂
Triphleba distinguenda (Strobl) 1♂
T. nudipalpis (Becker) 32♂, 3♀

Pipunculidae

Cephalops semifumosus (Kowarz) 1♂
C. ultimus (Becker) 1♀

TRAP 18, 18th August

Syrphidae

Melanostoma scalare (Fabricius) 1♀

Platycheirus peltatus (Meigen) 1♀

Cheilosia intonsa Loew 2♀

Pallopteridae

Palloptera ustulata Fallén 1♀

Sciomyzidae

Trypetoptera punctulata (Scopoli) 1♂

Lauxaniidae

Minettia rivosa (Meigen) 1♀

Psilidae

Psila rosae (Fabricius) group females 1♀

Opomyzidae

Geomyza tripunctata Fallén 1♀

Heleomyzidae

Suillia variegata (Loew) 1♂, 1♀

Drosophilidae

Scaptomyza (Parascaptomyza) pallida (Zetterstedt) 1♂, 1♀

Drosophila subobscura Collin in Gordon 3♀

Ephydriidae

Limnella quadrata (Fallén) 1♀

Sphaeroceridae

Chaetopodella scutellaris (Haliday) 2♂, 1♀

Opacifrons coxata (Stenhammar) 1♀

O. humida (Haliday) 2♂

O. septentrionalis (Stenhammar) 2♀

Agromyzidae

Liriomyza flaveola (Fallén) 2♀

Cerodontha (Poemyza) atra (Meigen) 1♀

TRAP 18, 18th August

Chloropidae

Tricimba cincta (Meigen) 1♂
Elachiptera tuberculifera (Corti) 1♂

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila fugax (Meigen) 1♂
B. striolata (Fallén) 1♂
Botanophila or *Delia* females (not determined) 2♀
Hylemyza partita (Meigen) (= *lasciva*) 1♂, 1♀
Pegoplata nitidicauda (Schnabl) (= *virginea* auctt.) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Muscina prolapsa (Harris) (= *pabulorum* (Fallén)) 1♂
Hydrotaea irritans (Fallén) 1♂, 36♀
Morellia aenescens Robineau-Desvoidy 4♀
Phaonia angelicae (Scopoli) (= *basalis* (Zetterstedt)) 3♀
P. valida (Harris) (= *viarum* Robineau-Desvoidy) 1♂
Helina depuncta (Fallén) 1♀
Hebecnema vespertina (Fallén) (= *affinis* Malloch) 1♂
Coenosia agromyzina (Fallén) 1♂
C. infantula Rondani 1♂

Fanniidae

Fannia females (not determined) 1♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Lucilia ampullacea Villeneuve 1♀
L. caesar (Linnaeus) 1♀
Pollenia pediculata Macquart (= *pseudorudis* Rognes) 1♂

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Parasarcophaga caerulescens (Zetterstedt) (= *scoparia* (Pandellé) 1♂
Sarcophaga carnaria (Linnaeus) (= *schulzi* Muller, var. *vulgaris* Rohdendorf of van Emden) 1♂
S. variegata (Scopoli) (= *carnaria* auctt., typical form of van Emden) 1♂
Sarcophaga species females 7♀

Tachinidae (determined from and following Belshaw, RES Handbook)

Actia pilipennis (Fallén) 1♀

LIST OF DIPTERA PRESENT IN TRAP 18 ON 23RD AUGUST

Tipulidae

Tipula oleracea Linnaeus 1♂

Psychodidae

1 specimen

Ceratopogonidae

Forcipomyia species (not determined) 1♀

Keroplatidae

Neoplatyura modesta (Winnertz) 1♂

Mycetophilidae

Monoclona rufilatera (Walker) 1♂, 1♀

Acnemia nitidicollis (Meigen) 2♂

Sceptonia cryptocauda Chandler 2♂

S. nigra (Meigen) 1♂

Sciaridae

undetermined Sciaridae 2

Cecidomyiidae

6 specimens

Hybotidae

Hybos culiciformis (Fabricius) 12♂, 3♀

Drapetis (D.) *párilis* Collin 1♂

D. (Elaphropeza) ephippiata (Fallén) 1♂, 3♀

Dolichopodidae

Chrysotus species (females of *gramineus* group) 4♀

Dolichopus festivus Haliday 1♂

D. plumipes (Scopoli) 1♀

D. trivialis Haliday 1♂

D. wahlbergi Zetterstedt 1♀

Medetera jacula (Fallén) 2♂

M. pallipes (Zetterstedt) 2♂, 4♀

M. truncorum Meigen 4♀

Phoridae

Borophaga incrassata (Meigen) 4♂, 1♀

Diplonevra funebris (Meigen) 5♂

D. nitidula (Meigen) 13♂

TRAP 18, 23rd August

D. pilosella Schmitz 15♂
Diplonevra species females (not determined) 7♀
Megaselia species (not determined) 29♂, 54♀
Metopina heselhausi Schmitz 1♀
M. oligoneura (Mik) 1♂, 2♀
Phalacrotophora fasciata (Fallén) 1♀
Phora atra (Meigen) 4♂
Triphleba distinguenda (Strobl) 2♂
T. nudipalpis (Becker) 45♂, 1♀

Pipunculidae

Cephalops obtusinervis (Zetterstedt) 1♀
C. semifumosus (Kowarz) 4♀
C. ultimus (Becker) 1♀
Tomosvaryella kuthyi (Aczél) 1♀

Syrphidae

Episyrrhus balteatus (De Geer) 2♀
Baccha elongata (Fabricius) sensu lato 1♀
Melanostoma mellinum (Linnaeus) 1♂
M. scalare (Fabricius) 2♀
Platycheirus peltatus (Meigen) 2♀
Cheilosia pagana (Meigen) 6♀
Eristalis pertinax (Scopoli) 1♀

Tephritidae

Phagocarpus purmundus (Harris) 1♀

Pallopteridae

Palloptera umbellatarum (Fabricius) 2♂, 1♀

Sciomyzidae

Trypetoptera punctulata (Scopoli) 1♂

Lauxaniidae

Sapromyza sexpunctata Meigen 1♂
Lyciella rorida (Fallén) 1♀
Calliopum aeneum (Fallén) 1♂

Psilidae

Psila rosae (Fabricius) group females 1♀

Opomyzidae

Opomyza germinationis (Linnaeus) 1♂

TRAP 18, 23rd August

Sepsidae

Sepsis species 1♀

Heleomyzidae

Suillia affinis (Meigen) 1♀
S. variegata (Loew) 2♂, 1♀

Drosophilidae

Scaptomyza (Parascaptomyza) pallida (Zetterstedt) 1♀
Drosophila subobscura Collin in Gordon 2♀

Ephydriidae

Philygria stictica (Meigen) 1♂

Sphaeroceridae

Chaetopodella scutellaris (Haliday) 1♂
Spelobia palmata (Richards) 1♂

Agromyzidae

Agromyza mobilis Meigen 2♂, 2♀
Liriomyza flaveola (Fallén) 2♀
Phytomyza species 1♀
Cerodontha (Poemyza) atra (Meigen) 2♀

Chloropidae

Tricimba cincta (Meigen) 2♂
Oscinella species (not determined) 2♂, 2♀
Chlorops hypostigma Meigen 1♂

Scathophagidae

Scathophaga furcata (Say) 1♂

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila fugax (Meigen) 5♂
Botanophila or *Delia* females (not determined) 15♀
Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 1♂
Hylemyza partita (Meigen) (= *lasciva*) 2♀
Pegomya calyptrata (Zetterstedt) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea albipuncta (Zetterstedt) 1♀
H. irritans (Fallén) 86♀
H. meteorica (Linnaeus) 1♀

TRAP 18, 23rd August

Mesembrina meridiana (Linnaeus) 2♀
Polietes lardarius (Fabricius) 3♂
Musca autumnalis De Geer 1♀
Neomyia viridescens (Robineau-Desvoidy) (= *cornicina* auctt.) 1♂
Eudasysphora (= *Dasyphora*) *cyanella* (Meigen) 1♂
Phaonia angelicae (Scopoli) (= *basalis* (Zetterstedt)) 2♀
P. pallida (Fabricius) 1♀
P. tuguriorum (Scopoli) (= *signata* (Meigen)) 1♀
P. valida (Harris) (= *viarum* Robineau-Desvoidy) 2♀
Helina depuncta (Fallén) 7♀
H. impuncta (Fallén) 5♀
H. quadrum (Fabricius) 1♀
Hebecnema vespertina (Fallén) (= *affinis* Malloch) 1♂
Coenosia albicornis Meigen (= *lineatipes* (Zetterstedt)) 1♀
C. infantula Rondani 2♂

Fanniidae

Piezura graminicola (Zetterstedt) 1♀
Fannia females (not determined) 2♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Calliphora vicina Robineau-Desvoidy 1♀
Lucilia ampullacea Villeneuve 2♀
L. caesar (Linnaeus) 4♀
Pollenia angustigena Wainwright 2♀
P. pediculata Macquart (= *pseudorudis* Rognes) 1♂, 1♀

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Helicophagella agnata (Rondani) 1♂
Sarcophaga carnaria (Linnaeus) (= *schulzi* Muller, var. *vulgaris* Rohdendorf of van Emden) 4♂
S. subvicina Rohdendorf 1♂
S. variegata (Scopoli) (= *carnaria* auct., typical form of van Emden) 1♂
Sarcophaga species females 10♀

Tachinidae (determined from and following Belshaw, RES Handbook)

Siphona geniculata (De Geer) 2♂

LIST OF DIPTERA PRESENT IN TRAP 18 ON 26TH AUGUST

Limoniidae

Neolimonia dumetorum (Meigen) 1♂

Bibionidae

Dilophus febrilis (Linnaeus) 1♀

Mycetophilidae

Leia cylindrica (Winnertz) 1♂

Sciaridae

undetermined Sciaridae 1

Cecidomyiidae

4 specimens

Hybotidae

Hybos culiciformis (Fabricius) 1♂, 2♀

Drapetis (D.) assimilis (Fallén) 1♂

Dolichopodidae

Campsicnemus curvipes (Fallén) 1♂

Argyra argentina (Meigen) 1♀

Dolichopus griseipennis Stannius 1♀

Medetera impigra (Fallén) 1♂

M. jacula (Fallén) 1♀

M. truncorum Meigen 1♀

Phoridae

Conicera floricola Schmitz 1♂

Diplonevra nitidula (Meigen) 5♂, 1♀

D. pilosella Schmitz 5♂

Diplonevra species females (not determined) 1♀

Phora species females (not determined) 1♀

Triphleba distinguenda (Strobl) 2♂

T. nudipalpis (Becker) 8♂, 2♀

Pipunculidae

Cephalops semifumosus (Kowarz) 1♂, 1♀

Eudorylas subfascipes Collin 1♀

Syrphidae

Melanostoma scalare (Fabricius) 1♀

Platycheirus peltatus (Meigen) 1♂, 1♀

TRAP 18, 26th August

Helophilus pendulus (Linnaeus) 1♀

Pallopteridae

Palloptera umbellatarum (Fabricius) 1♂, 1♀

Lauxaniidae

Lyciella subfasciata (Zetterstedt) 1♀

Heleomyzidae

Suillia affinis (Meigen) 2♀

S. variegata (Loew) 1♂

Drosophilidae

Scaptomyza (Parascaptomyza) pallida (Zetterstedt) 1♂, 2♀

Drosophila subobscura Collin in Gordon 2♀

Ephydriidae

Limnella quadrata (Fallén) 1♂

Sphaeroceridae

Spelobia palmata (Richards) 1♂

Agromyzidae

Napomyza hirticornis (Hendel) 1♀

Scathophagidae

Scathophaga stercoraria (Linnaeus) 6♂, 1♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila or *Delia* females (not determined) 1♀

Hylemya urbica (van der Wulp) (= *latifrons* Schnabl) 1♀

H. variata (Fallén) 1♀

Hylemyza partita (Meigen) (= *lasciva*) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Polites lardarius (Fabricius) 2♂

Morellia aenescens Robineau-Desvoidy 1♀

Phaonia rufiventris (Scopoli) (= *populi* (Meigen)) 1♀

P. tuguriorum (Scopoli) (= *signata* (Meigen)) 2♂

P. valida (Harris) (= *viarum* Robineau-Desvoidy) 2♀

Helina depuncta (Fallén) 4♀

Coenosia albicornis Meigen (= *lineatipes* (Zetterstedt)) 1♀

TRAP 18, 26th August

Fanniidae

Fannia females (not determined) 1♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Lucilia ampullacea Villeneuve 1♀

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga carnaria (Linnaeus) (= *schulzi* Muller, var. *vulgaris* Rohdendorf of van Emden) 1♂
Sarcophaga species females 5♀

Tachinidae (determined from and following Belshaw, RES Handbook)

Macquartia tenebricosa (Meigen) 1♀

LIST OF DIPTERA PRESENT IN TRAP 18 ON 30TH AUGUST

Psychodidae

1 specimen

Chironomidae

1 specimen

Ceratopogonidae

1 ♀ specimen (not determined)

Bibionidae

Dilophus febrilis (Linnaeus) 3♂, 4♀

Keroplatidae

Neoplatyura modesta (Winnertz) 1♂, 3♀

Mycetophilidae

Acnemia nitidicollis (Meigen) 1♂

Zygomyia species females (not determined) 1♀

Sceptonia nigra (Meigen) 1♂

Sciaridae

Schwenkfeldina carbonaria (Meigen) 2♂, 1♀

undetermined Sciaridae 7

Cecidomyiidae

5 specimens

Stratiomyidae

Chorisops nagatomii Rozkošny 1♂

Hybotidae

Hybos culiciformis (Fabricius) 3♂, 2♀

Drapetis (D.) parilis Collin 1♀

D. (Elaphropeza) ephippiata (Fallén) 1♀

Empididae

Rhamphomyia erythrophthalma Meigen (typical) 1♂

Dolichopodidae

Systemus scholtzii (Loew) 1♀

Medetera astrusa Thuneberg 1♂, 1♀

TRAP 18, 30th August

M. *truncorum* Meigen 1♀

Phoridae

Diplonevra nitidula (Meigen) 7♂

D. *pilosella* Schmitz 14♂

Diplonevra species females (not determined) 4♀

Megaselia species (not determined) 57♂, 90♀

Metopina galeata (Haliday) 2♂, 1♀

M. *oligoneura* (Mik) 3♂, 3♀

Phora species females (not determined) 5♀

Pseudacteon formicarum (Verrall) 1♂

Triphleba distinguenda (Strobl) 6♂, 1♀

T. *nudipalpis* (Becker) 38♂, 10♀

Pipunculidae

Chalarus species (not determined) 1♀

Cephalops semifumosus (Kowarz) 1♂, 1♀

C. *ultimus* (Becker) 2♀

Syrphidae

Baccha elongata (Fabricius) sensu lato 1♂

Melanostoma scalare (Fabricius) 2♀

Platycheirus scutatus (Meigen) 1♀

Pallopteridae

Palloptera ustulata Fallén 3♀

Lonchaeidae

Lonchaea laticornis Meigen 1♀

Clusiidae

Clusiodes species 1♀

Sepsidae

Sepsis orthocnemis Frey 1♂

S. *punctum* (Fabricius) 2♂

Sepsis species 1♀

Drosophilidae

Drosophila subobscura Collin in Gordon 5♀

Ephydriidae

Philygria stictica (Meigen) 1♀

TRAP 18, 30th August

Sphaeroceridae

Chaetopodella scutellaris (Haliday) 3♂
Spelobia palmata (Richards) 1♂, 1♀

Agromyzidae

Agromyza mobilis Meigen 1♀
Liriomyza flaveola (Fallén) 2♂, 1♀

Chloropidae

Elachiptera tuberculifera (Corti) 2♂
Oscinella species (not determined) 1♂, 1♀

Scathophagidae

Scathophaga stercoraria (Linnaeus) 1♂, 3♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila or *Delia* females (not determined) 4♀
Emmesomyia socia (Fallén) (= *villica* Meigen) 1♀
Pegoplata nitidicauda (Schnabl) (= *virginea* auctt.) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 12♀
Mesembrina meridiana (Linnaeus) 1♂
Polietes lardarius (Fabricius) 3♂
Eudasypheora (= *Dasyphora*) *cyanella* (Meigen) 1♂
Phaonia angelicae (Scopoli) (= *basalis* (Zetterstedt)) 1♀
P. errans (Meigen) 1♂
P. mystica (Meigen) (= *vittifera* (Zetterstedt)) 1♀
P. rufiventris (Scopoli) (= *populi* (Meigen)) 1♀
P. valida (Harris) (= *viarum* Robineau-Desvoidy) 2♂, 7♀
Helina depuncta (Fallén) 1♂, 5♀
H. impuncta (Fallén) 8♀
Mydaea ancilla (Meigen) 1♀
Hebecnema vespertina (Fallén) (= *affinis* Malloch) 2♀
Coenosia albicornis Meigen (= *lineatipes* (Zetterstedt)) 1♂, 4♀

Fanniidae

Fannia females (not determined) 3♀

Rhinophoridae

Paykullia maculata (Fallén) 1♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Lucilia ampullacea Villeneuve 1♀

TRAP 18, 30th August

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga carnaria (Linnaeus) (= *schulzi* Muller, var. *vulgaris* Rohdendorf of van Emden) 3♂
Sarcophaga species females 8♀

LIST OF DIPTERA PRESENT IN TRAP 18 ON 2ND SEPTEMBER

Bibionidae

Dilophus febrilis (Linnaeus) 1♂, 1♀

Mycetophilidae

Sciophila species (undetermined female) 1♀

Mycetophila cingulum Meigen 1♂

Zygomyia notata (Stannius) 1♂

Hybotidae

Hybos culiciformis (Fabricius) 1♂

Dolichopodidae

Dolichopus griseipennis Stannius 2♂

Phoridae

Diplonevra nitidula (Meigen) 1♀

Megaselia species (not determined) 5♂, 2♀

Triphleba nudipalpis (Becker) 3♂, 2♀

Pallopteridae

Palloptera ustulata Fallén 1♀

Heleomyzidae

Suillia variegata (Loew) 1♀

Drosophilidae

Scaptomyza (Parascaptomyza) pallida (Zetterstedt) 2♀

Drosophila subobscura Collin in Gordon 1♀

Sphaeroceridae

Minilimosina vitripennis (Zetterstedt) 1♀

Chloropidae

Oscinella species (not determined) 1♂

Scathophagidae

Scathophaga stercoraria (Linnaeus) 1♂, 2♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila or *Delia* females (not determined) 2♀

Hylemya urbica (van der Wulp) (= *latifrons* Schnabl) 1♀

TRAP 18, 2nd September

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea armipes (Fallén) 1♂
H. irritans (Fallén) 2♀
Polites lardarius (Fabricius) 4♂, 2♀
Phaonia errans (Meigen) 1♂
P. tuguriorum (Scopoli) (= *signata* (Meigen)) 1♂
Helina depuncta (Fallén) 4♀
H. impuncta (Fallén) 3♀

Fanniidae

Fannia females (not determined) 1

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Lucilia ampullacea Villeneuve 1♀
L. caesar (Linnaeus) 1♀
Pollenia angustigena Wainwright 1♀
P. pediculata Macquart (= *pseudorudis* Rognes) 1♀

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga species females 2♀

LIST OF DIPTERA PRESENT IN TRAP 18 ON 6TH SEPTEMBER

Tipulidae

Tipula paludosa Meigen 1♂

Limoniiidae

Rhipidia maculata Meigen (= *duplicata* auctt.) 1♀

Psychodidae

1 specimen

Bibionidae

Dilophus febrilis (Linnaeus) 3♀

Mycetophilidae

Monoclonia rufilatera (Walker) 6♂

Acnemia nitidicollis (Meigen) 1♂

Docosia fumosa Edwards 1♀

Phronia species females (not determined) 1♀

Zygomyia notata (Stannius) 1♂

Sciaridae

undetermined Sciaridae 2

Cecidomyiidae

3 specimens

Hybotidae

Platypalpus longicornis (Meigen) 1♀

Empididae

Rhamphomyia erythrophthalma Meigen (typical) 1♂, 1♀

Dolichopodidae

Dolichopus griseipennis Stannius 1♂

D. plumipes (Scopoli) 2♀

Medetera truncorum Meigen 2♂, 3♀

Lonchopteridae

Lonchoptera lutea Panzer 1♀

Phoridae

Borophaga incrassata (Meigen) 1♀

TRAP 18, 6th September

Diplonevra nitidula (Meigen) 5♂, 1♀
D. pilosella Schmitz 5♂
Diplonevra species females (not determined) 1♀
Megaselia species (not determined) 26♂, 31♀
Metopina galeata (Haliday) 1♂
M. heselhausi Schmitz 1♀
M. oligoneura (Mik) 1♀
Triphleba distinguenda (Strobl) 3♂, 1♀
T. nudipalpis (Becker) 12♂, 2♀

Pipunculidae

Cephalops semifumosus (Kowarz) 1♀
Eudorylas subfascipes Collin 2♂, 1♀

Syrphidae

Episyrphus balteatus (De Geer) 2♂
Melanostoma scalare (Fabricius) 3♀

Dryomyzidae

Dryomyza analis (Fallén) (= *anilis* auctt.) 1♂

Sepsidae

Sepsis fulgens Meigen 1♂
Sepsis species 2♀

Heleomyzidae

Suillia fuscicornis (Zetterstedt) 1♂

Drosophilidae

Scaptomyza (Parascaptomyza) pallida (Zetterstedt) 1♂
Drosophila subobscura Collin in Gordon 1♀

Ephydriidae

Philygria stictica (Meigen) 1♀

Sphaeroceridae

Pullimosina pullula (Zetterstedt) 1♀
Spelobia palmata (Richards) 1♀

Chloropidae

Oscinella species (not determined) 7♂, 6♀

TRAP 18, 6th September

Scathophagidae

Scathophaga stercoraria (Linnaeus) 5♂, 4♀

Anthomyiidae (nomenclature updated from D.M. Ackland MS list)

Botanophila or *Delia* females (not determined) 7♀
Emmesomyia socia (Fallén) (= *villica* Meigen) 1♀
Hylemya vagans (Panzer) (= *strenua* Robineau-Desvoidy) 2♀
Mycophaga testacea (Gimmerthal) 1♂
Pegomya bicolor (Wiedemann) 1♀

Muscidae (nomenclature updated from Pont in Palaearctic Catalogue)

Hydrotaea irritans (Fallén) 4♀
Polites lardarius (Fabricius) 3♂, 1♀
Phaonia rufiventris (Scopoli) (= *populi* (Meigen)) 1♀
Helina depuncta (Fallén) 4♂, 1♀
H. impuncta (Fallén) 12♀
H. lasiophthalma (Macquart) 1♀
Coenosia albicornis Meigen (= *lineatipes* (Zetterstedt)) 2♀

Fanniidae

Fannia pallitibia (Rondani) 1♀
Fannia females (not determined) 2♀

Rhinophoridae

Paykullia maculata (Fallén) 1♀

Calliphoridae (nomenclature follows Rognes, Fauna Ent. Scand.)

Melanomya nana (Meigen) 1♂
Bellardia viarum (Robineau-Desvoidy) (= *pusilla* auctt., *aculeata* (Pandellé)) 1♀
Lucilia caesar (Linnaeus) 4♀

Sarcophagidae (nomenclature follows Pape, Fauna Ent. Scand.)

Sarcophaga species females 3♀

Tachinidae (determined from and following Belshaw, RES Handbook)

Phryxe nemea (Meigen) 1♀
Pales pavida (Meigen) 1♀