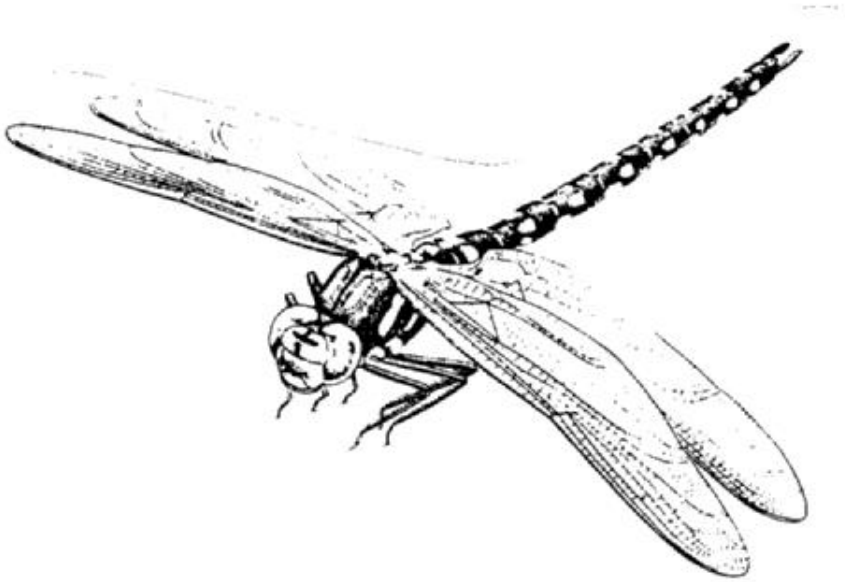
A SITE SURVEY FOR THE CONSERVATION OF ODONATA ON THE ASHDOWN FOREST COMMONS.

- AP FOWLES



1985

A SITE SURVEY FOR THE CONSERVATION OF ODONATA ON THE ASHDOWN FOREST COMMONS

CONTENTS

> "Ashdown Forest itself is now a mosaic of high open heathland: dry, damp, and wet, dotted with oak-birch woodland and attractive odd clumps of pine. Its landscape is deeply carved into wooded ravines, or ghylls, from which flow the many headstreams of the Medway and the Ouse. Among these features are larger tracts of woodland wherein lie several secluded private lakes, and the whole region gradually passes into the forested ridges and slopes of the High Weald." (Penn 1984)

INTRODUCTION

The richness, diversity, and uniqueness of the Ashdown Forest owes its being, as does all of our natural heritage, to the underlying geology that has shaped the land and to a large extent governed the environmental conditions which prevail today. The Forest's geomorphological structure has its roots in the events of numerous glaciations that have occurred since the sandstones which form the basic matrix of the current soils were laid down. In the Lower Cretaceous Age the region was part of a huge delta where the great northern rivers deposited their sands and silts. This gave rise to the Hastings Beds, of which the Ashdown sands are a characteristic mixture of sandstones and silts, yielding a permeable and sterile soil of rather loose grains. During interglacial periods this sandrock was deeply eroded by meltwater streams, carving out the ghylls and depositing further silts on the valley bottoms. In between the Forest had been covered by an ancient sea and capped with chalk but natural erosion has stripped this away and we are left with a landscape of ridges in that early sandrock, a topography that has imposed its own restrictions on the fauna, and flora that survives.

It is a harsh environment with poor soils yielding little nutrient for plant life; high rainfall continually eroding the base rock; and a history of human activity which has further depleted the fertility of the land. The steepness of the valleys has resulted in a shallow peat deposition and where bog-peat did accumulate on more level ground, extensive peat-cutting for centuries has reduced this to a thin skin rarely more than twenty-five centimetres deep. One of the striking features of the Ashdown Forest in comparison with that other great southern expanse of heathland, the New Forest, is the absence of quaking valley mires. Where they did occur, as at Newbridge, the peat has long ago been stripped away. For dragonflies, then, it is a largely inhospitable place to live, with few remaining natural features to occupy. The humid heath that now covers much of the Forest has a rather low water table and few heathland pools retain water throughout the summer months; the streams are generally fast-flowing through deep ravines and often over-shaded by tree cover; and mire habitats are very scarce.

Many of the best dragonfly sites within the boundary of the Royal Forest are now within the private estates, which have a much greater proportion of freshwater habitats than the Common Lands administered by the Ashdown Forest Board of Governors. This is no accident: it is a result of the varied land use that the Forest has experienced since the Romans recognised the natural potential of the region almost two thousand years ago.

The Celts had begun to work the iron-pan of the Forest for domestic purposes for 500 years before the arrival of the Romans, mixing the ore with charcoal and smelting the mixture on a hearth. The Romans developed this process and built improved 'bloomeries' all over the Weald, continually expanding the industry until the region became an important administrative centre for the production of iron. This necessitated the improvement of access across the Forest and the impressive London-Lewes Way, a raised causeway metalled with iron slag, was constructed about AD100. Although the Romans probably deserted the Forest in the early Third Century their network of roads would have enabled the local peasantry to occupy small settlements in the vicinity.

Iron-working went into a long decline until Henry VII established the first water-powered blast furnace in Britain at Newbridge in 1496. The high rainfall and steep valleys that are such a feature of the Forest were ideal to provide the necessary power to drive the bellows and the hammer. This marked an upsurge in the iron industry and, significantly, led to the creation of numerous "hammer ponds" to retain the desired head of water. Many of the lakes present within the Forest boundary owe their origins to this need for stored water and today the Weald would be a far poorer place for dragonflies without them. Newbridge 'bay' is now neglected, a fate that has befallen many of the former hammer ponds and only the banks and the stream remain. However, several important lakes have been maintained and enlarged over the intervening years.

As the iron industry prospered through the sixteenth century the ironmasters built large houses near the furnaces. These frequently coincided with areas of fertile soils fed by springs welling up from the junction between the Ashdown Sandstone and the Wealden Clay: Boringwheel, Old Forge, and Pippingford are good examples. These large estates had been enclosed, along with many small-holdings on the Forest, following the dissolution of the Royal Forest in 1651 after the overthrow of Charles I. The Decree of 1693 established the divisions of the Forest that exist today - 7300 acres were enclosed, leaving 6676 acres as Common Land under the Lord of the Manor of Duddleswell.

The Royal Forest had been declared in 1372 when Edward III had granted the 'free chase' to his son, John of Gaunt. Thus, the area now known as the Ashdown Forest came into being as almost 14000 acres were enclosed by the medieval pale - a five-foot high earth bank topped with wooden stakes and ditched on the Forest side to keep in the deer. Various monarchs hunted the Forest for almost three hundred years and its present-day vegetation is very much a legacy of the practices exercised during that period.

The medieval Foresters preserved trees for the browsing deer and maintained coverts with tangles of bramble and thickets of scrub to give them day-time shelter. At the same time the Commoners exercised their customary rights of pasturage, heathbote, turbary, etc. To maintain open land for pasturage the heaths were frequently set on fire and for centuries the Forest was subjected to the abuse of over-grazing and over-burning. The extensive fires damaged Sphagnum cover and turbary, the right to dig peat, continued until the practice was made illegal in 1885 with the formation of the Board of Governors. Heathbote, the cutting of litter, was very important to the small-holders and has figured prominently in the legal history of the Forest. Bracken was regularly cut as a substitute for straw and Gorse, Broom and Birch were also taken.

The deterioration of the soils continued as many trees were felled for the iron industry, for the building of the manorial houses, and even for repairs to Pevensey Castle. This established the patchwork of heathland and woods that to a large extent still exists today, but in the last fifty years or so there has been a steady change from abuse to neglect. Litter-cutting is now virtually unknown and the grazing herds of cattle have disappeared to be replaced by two small flocks of sheep. One of the chief problems here is that an Act of Parliament will be required to fence off the roads and prevent casualties and until that happens (and for the good of the Forest it surely must) farmers are reluctant to raise stock on the heaths. In the meantime, we must accept the inexorable encroachment of Birch and Bracken as the Forest slowly reverts to scrub woodland and claims back the open heathland that has such vital ecological significance.

SURVEY

The Ashdown Forest has been selected by the Nature Conservancy Council as a Grade 1 Nature Conservation Review Site, this implies that it is one of the best examples of lowland heath in Britain. The heathland is mainly composed of a humid heath type characterised by the association of Calluna-Erica cinerea-Erica tetralix but there are also areas of dry heath and wet heath. The leached acid soils give rise to nutrient-poor waters, generally of an oligotrophic or weakly mesotrophic nature, although ponds dug in the seams of clay (Ridge Road and Ellison's Pond, for example) are of a slightly higher trophic status. The Wealden lakes have been called "arguably the most important wetland asset in the county" (Chelmick 1979) and it is important to reflect upon the Ashdown Forest's contribution to this asset and to compare its Odonata fauna with the heathland of West Sussex.

The Ashdown Forest (and throughout this report from here on this will be taken to refer only to the Commons administered by the Board of Governors) has a restricted dragonfly fauna, limited in both its variety and abundance by the availability of breeding habitat. Heathland, generally, is extremely rich in dragonflies as the open vegetation harbours a wealth of insects for the feeding adults and the mesotrophic, sun-baked waters are ideal for larval development. Ashdown Forest has its insect-rich heathlands but lacks the wetland habitats that are so vital for breeding. Elsewhere in the Weald, as exemplified by the private estates within the medieval pale, there is a network of large ponds and lakes that support regionally important dragonfly populations - notably those species that prefer sheltered waters, such as Cordulia aenea, Somatochlora metallica and Sympetrum sanguineum. The scarcity of even moderate-sized ponds on the Forest seriously reduces its capacity to support these species.

Negative results are always said to be as scientifically informative as positive ones and in this respect the Ashdown Forest is very interesting. Most strikingly, the characteristic species of peaty habitats are all (with the notable exception of Ceriagrion tenellum), absent from the Forest. Sympetrum danae and Aeshna juncea are both present at a few sites on the Midhurst heaths whereas Orthetrum coerulescens has always been scarce in Sussex. Libellula quadrimaculata, however, is widespread throughout the county and elsewhere occurs in abundance on heathland pools but the single specimen recorded on the Forest is believed to have been a migrant. This is a most curious situation and presumably has ecological implications which may one day help us to understand the environmental requirements of these species.

What remains is a s0mewhat impoverished, but representative fauna of the High Weald. Of the twenty species recorded there are probably only sixteen breeding on the Forest and the other four are either vagrants from neighbouring waters (Platycnemis pennipes and Somatochlora metallica) or perhaps continental migrants (Libellula quadrlmaculata and Aeshna mixta). In most cases the resident species show clear associations with particular habitat types, although a few have more catholic tastes. The site inventory which follows details, for each individual water, the species to be found there but it is also possible to draw constructive generalisations.

Small to medium-sized ponds form the majority of the available sites on the Forest; there would appear to be about thirty of them suitable for dragonflies. Their origins are varied, some are old bomb-craters, some are ancient quarries or claypits, and a few have been deliberately dug for wildlife purposes. They generally occur at about 150 m. a.s.l. Characteristically they support the following species - Lestes sponsa, Coenagrion puella, Pyrhhosoma nymphula, Sympetrum striolatum and Aeshna cyanea. The more mesotrophic pools will also have Ischnura elegans, Libellula depressa, and Anax imperator whilst the few larger pools may contain Enallagma cyathigerum, Erythromma najas, Sympetrum

sanguineum, Cordulia aenea and Aeshna grandis in addition. At present the highly acid heathland pools with Ceriagrion tenellum are only known to have Coenagrion puella and Pyrrhosoma nymphula as associates although Lestes sponsa and Sympetrum striolatum at least should also be present.

The handful of soligenous mires on the Forest are relatively species-poor; Pyrrhosoma nymphula, Sympetrum striolatum and Lestes sponsa typically occur but further surveys could also reveal Ceriagrion tenellum and perhaps Orthetrum coerulescens. Many of the Forest streams are too shady for breeding Odonata but in suitable conditions Calopteryx virgo and Cordulegaster boltoni are the specialist residents. Where the streams are sluggish and ponded, for instance where bridleways reduce water flow, Coenagrion puella, Sympetrum striolatum, Aeshna cyanea and Aeshna grandis may also be present. It is in these situations that foraging individuals of Somatochlora metallica and Platycnemis pennipes should be looked for.

It is difficult to assign a rank to sites within the Forest but a few are worthy of individual mention. The larger of the Ridge Road ponds would undoubtedly be foremost with two regionally notable species, Cordulia aenea and Sympetrum sanguineum, breeding there. Fifteen dragonfly species have been recorded in the past five years and this would therefore qualify as a Site of Special Scientific Interest on that fact alone. However, more realistically, there are probably only thirteen breeding species (still an exceptional figure). The other Ridge Road pond could soon become equally important if the correct conditions are maintained.

Another important site is Old Lodge Bottom, where D G Chelmick recorded fourteen species in 1972 and 1973 - though I suspect four of these to have been vagrants. Regrettably, this site was not visited during the present survey although the upper reaches of the stream were surveyed with poor results. It may be that Old Lodge Bottom has already become scrubbed over and lost its suitability for dragonflies - if this is the case, remedial work should be undertaken at the earliest opportunity.

Ellison's Pond is also of great value to the Forest. Its nine resident species are common elsewhere but here they occur in some abundance and inevitably draw attention from even the most casual observer. Ellison's Pond probably does a very good PR job for Odonata and nature conservation in general.

Whilst researching past records for this report it became clear that some sites on the private estates were of national significance for Odonata and it may help to put the Forest fauna in perspective if brief mention is made of them. The Pippingford Park lakes would appear to be extraordinarily rich in species, nineteen have been recorded there, and strenuous efforts should be made to conserve this habitat. It is of great interest that both Platycnemis pennipes and Ceriagrion tenellum, damselflies requiring very different conditions, are present. Somatochlora metallica and Cordulia aenea both occur in good numbers and Aeshna juncea has also been reported. It would be unusual if Sympetrum sanguineum, currently unrecorded, did not also occur. Another site worthy of formal conservation status is the pool in the Isle of Thorns enclosure where K D Wilson recorded ten species on 16 July 1983, including Cordulia aenea, Orthetrum coerulescens, and a surprising abundance of Somatochlora metallica. In view of the latter's status in Britain this site must be considered as holding a highly significant population.

CONSERVATION

From the foregoing it should be plain that there is plenty of room for improvement with regard to the conservation of dragonflies on the Ashdown Forest. Great strides have been made in the past couple of years, notably with the restoration of the Chelwood pool and the commendable work undertaken at Ridge Road. However, there should be no complacency and no relaxing of effort. A regular watch should be kept on the most significant sites and a comprehensive maintenance policy should be implemented. Coupled with this should be a broader management plan for the improval of other localities throughout the Forest.

Garth Christian's words of 1967 still hold today - "scrub clearance in the valleys, bracken control experiments, and the digging of small bog pools... are the sort of tasks waiting to be done" (Christian 1967). The pools which were probably once widespread disappeared as the peat was stripped away and the seepages in the mires of the headwaters (or "collects") became overgrown with tussocks of Molinia as the grazing stock declined. The creation of small pools in suitable habitat would be of great benefit and even shallow scrapes in water-logged areas are of immense value. It is obviously not feasible to excavate large ponds on the Forest and therefore it is important that the few that do exist are properly maintained. It is essential that they should be kept open on the southern side to allow sunlight to get through but some tree cover may be kept on other banks to provide shade and shelter when required. Flight corridors to open heathland are particularly important for wooded ponds. The Ridge Road ponds, and eventually Ellison's Pond also, will require regular dredging to ensure that decaying plant material does not choke the water.

There are at present few streams on the Forest which are suitable for dragonflies and during the current survey only five were recognised as providing breeding conditions for Odonata. The stream fauna is never likely to be of regional significance but nonetheless management is recommended to preserve and enhance the status of Cordulegaster boltoni and Calopteryx virgo - both extremely attractive species! Many streams are bordered by a thin strip of Birch and Willow scrub and bankside clearance of selected fifty metre stretches would be of value.

There are, undeniably, many claims upon the manpower and resources available for conservation on Ashdown Forest - each one pressing in its own right. On a broad scale, scrub clearance and the re-introduction of grazing must qualify as top priority but consideration must also be given to the conservation of dragonflies. The Forest has a part to play in the efforts that are being made nationally to halt the decline of many British species and it has the potential to play a significant role in those aims. Dragonflies are widely recognised as indicators of the health of wetland habitats and, by implication, if dragonflies are once again common on the Forest then an unseen world of other aquatic invertebrates will also prosper.

> "and all the streams of the Forest were tinkling happily to find themselves their own pretty shape again, and the little pools lay dreaming of the life they had seen and the big things they had done." (Milne 1926)

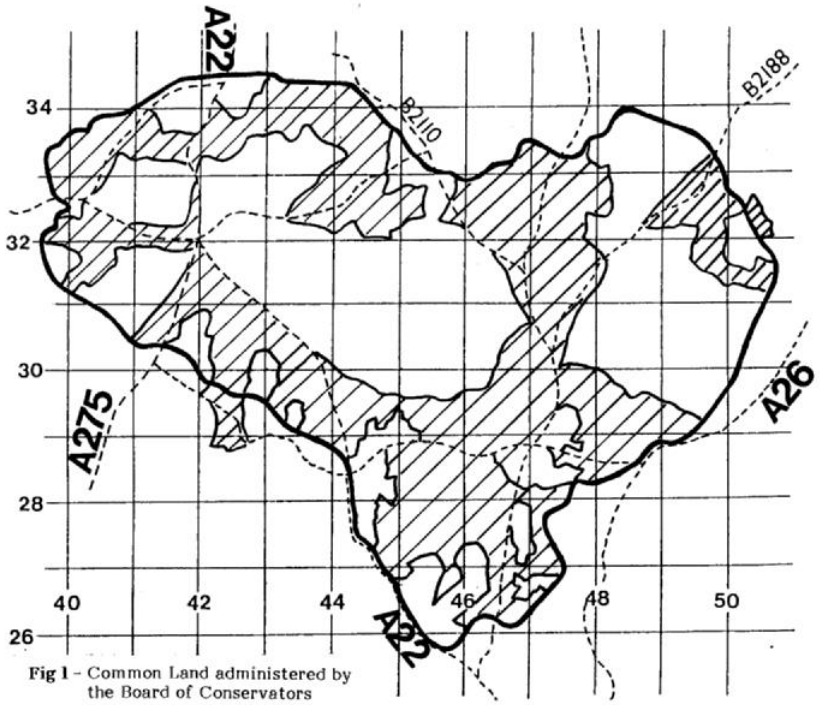


Fig 1 - Common Land administered by the Board of Conservators

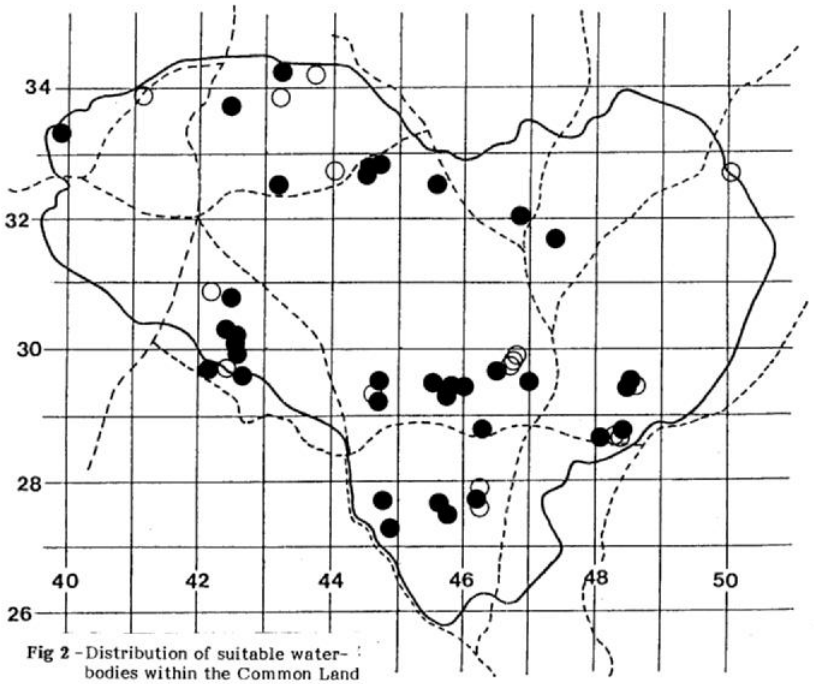


Fig 2 - Distribution of suitable water-bodies within the Common Land

SPECIES REPORT

Calopteryx virgo BEAUTIFUL DEMOISELLE
Recorded from four sites on the Forest although probably more widespread. Breeding colonies axe almost certainly present at Newbridge and Old Lodge Bottom but there are several other suitable localities. This damselfly prefers fast-flowing streams with stony bottoms and is quite shade-tolerant, however, many of the Forest streams are too wooded to support the species and efforts should be made to ensure that its favoured haunts retain some open areas. In addition to the above sites Calopteryx virgo could also be present at Wren's Warren, the Golf Course streams, Duddleswell Valley, and the Isle of Thorns.

Lestes sponsa EMERALD DAMSELFLY
One of the commonest dragonflies on the Forest, inhabiting ponds with lush vegetation and showing a distinct preference for acidic waters. There are, in fact, few still-water sites which are unsuitable for the species and no doubt further research will prove it to be widely distributed.

Platycnemis pennipes WHITE-LEGGED DAMSELFLY
First discovered on the Forest in 1972 when D G Chelmick recorded the species alongside the stream at Old Lodge Bottom and the following year it was found in abundance alongside the lakes in Pippingford Park. This was something of a surprise as P. pennipes is usually associated with slow-moving, well-vegetated, lowland rivers and elsewhere in Sussex is found along the Arun, Adur and Cuckmere (Chelmick 1979). At Pippingford it appears that this delicate damselfly breeds in the streams connecting the lakes but wanders considerably into the surrounding fields. This presumably accounts for the records at Old Lodge, Newbridge, and Duddleswell. It is extremely unlikely that a breeding colony exists anywhere on the Forest.

Pyrrhosoma nymphula LARGE RED DAMSELE1Y
A eurytopic species occurring on ponds, seepages and slow-moving streams. The most frequently encountered dragonfly on the Forest but rarely observed in large numbers. Even very small bodies of water will support P. nymphula although it is not tolerant of a great deal of shade.

Coenagrion puella AZURE DAMSFELFLY
Ponds and sluggish streams with tall emergent vegetation are favoured by C. puella and in such sites it can occur in great abundance. On the Forest it is widely distributed and often the commonest dragonfly on the wing at many localities.

Erythromma najas RED-EYED DAMSELFLY
Currently known only from the larger of the two Ridge Road ponds where it was discovered in small numbers during the present survey. E. najas is a species of moderately large water-bodies, (although it is also found on the dykes of the coastal levels) where the adults tend to remain in the middle resting on floating vegetation, such as Potamogeton spp., making short feeding flights and only rarely visiting the banks. This behaviour has presumably led to its being overlooked in the past but there are few suitable sites in the Forest. Restoration of the other two large ponds in the region (sites 3.3 and 6.8) has now provided additional habitat and the species could be expected to colonise them in future years.

Ischnura elegans BLUE-TAILED DAMSELFLY
Unaccountably rare on the Forest in view of its tolerance of a wide range of conditions. Apart from a 1972 record along the Old Lodge Bottom the only known localities are the Ridge Road ponds and Ellison's Pond. Small numbers are recorded annually at these sites but its general rarity on the Ashdown Forest is something of a mystery - perhaps the Forest is just too acidic for it and hence it is restricted to the few sites with more neutral water.

Enallagma cyathigerum COMMON BLUE DAMSELFLY
Although capable of breeding in a wide variety of freshwater habitats E. cyathigerum is commonest on large, open waters with abundant marginal vegetation. 1984 was apparently not a good season for the species locally as numbers were low at Ellison's Pond, its strongest site on the Forest. Very few individuals were recorded during the survey and it is likely that a restricted distribution can be anticipated but further localities may be discovered with additional fieldwork.

Ceriagrion tenellum SMALL RED DAMSELFLY
This is the only true bog species occurring within the Forest boundaries and is regarded as nationally notable and vulnerable due to its dependence on potentially threatened habitats. C. tenellum is now restricted to only two sites in Sussex, one on the Midhurst heaths and a series of small boggy pools in the Chelwood Gate area. In view of its precarious situation all efforts should be made to conserve and improve its haunts on the Ashdown Forest. Pools and seepages with partial Sphagnum cover are strongly favoured and the nearby provision of low scrub for shelter appears to be equally desirable. In this respect the Birch scrub in the vicinity of the Chelwood pools is probably advantageous, providing this is kept at sapling height without the possibility of the ponds becoming over-shaded.

There is a faint possibility that C. tenellum awaits discovery on other waters in the Forest and a future priority should be a survey of likely areas during the flight-period. Highly recommended are sites 7.2 and 9.7 but visits to 3.2, 4.3, 6.1 and 6.3 could also be worthwhile.

Aeshna grandis BROWN HAWKER
Surprisingly uncommon on the Forest, particularly as Chelmick (1979) regards A. grandis as the commonest Aeshna in the High Weald. Quite at home in dykes, streams and lakes throughout its range, within the Forest boundary it is only recorded from the Camp Hill streams and the Ridge Road ponds. At the latter site during the survey oviposition was observed in dead Typha stems.

Aeshna cyanea SOUTHERN HAWKER
Along with Sympetrum striolatum this is the commonest Anisopteran occurring on the Forest. Boggy ponds and seepages are apparently avoided but elsewhere this species is frequently encountered, particularly in muddy pools with a mesotrophic status - Ellison's pond for instance. A. cyanea can occur in tiny pools in astonishing abundance (Gaunt 1984) and the adults wander considerable distances in search of food. They are often present along woodland rides far from water.

Aeshna mixta SCARCE HAWKER
Formerly regarded as only a migrant to Britain from the continent, A. mixta is now well established in many southern counties and has recently spread as far as Wales. Along the coast, and particularly in downland coombes, this can be a very common insect in late summer but the Weald does not seem to suit it and there are only three confirmed records for the Forest - at Chelwood Gate, Nutley, and Old Lodge Bottom.

Anax imperator EMPEROR DRAGONFLY
A. imperator favours open, still-water sites and rapidly colonises newly- available habitats. Ellison's Pond is a well-known locality for this magnificent dragonfly but at present there are few really suitable sites. The new pond at the Forest Centre had an ovipositing female present during the survey and a male was also in residency at the renovated pond at Chelwood.

Cordulegaster boltoni GOLDEN-RINGED DRAGONFLY
The most impressive of the Forest's dragonflies, creating an unforgettable sight as it hawks up and down the narrow streams. It is very much a species of moderately fast-flowing streams with silty bottoms and as such the high rainfall, topography and substrate of the Ashdown Forest is perfectly suited to it. Elsewhere in Sussex C. boltoni is rather local and

hence conservation of suitable habitat within the Forest is highly desirable. However, it is less tolerant of shady conditions than Calopteryx virgo, the other principal stream-dweller of the region, and hence many of the forest's streams are untenanted. Some bankside clearance of scrub is therefore recommended - the Poundgate area, for instance, could relatively easily become a breeding locality following considerate management.

Cordulia aenea DOWNY EMERALD
A regionally notable species that is fairly widespread in the Weald but was only confirmed as present on the Forest during this survey. Fairly large, sheltered ponds are the favoured localities for C. aenea, particularly where the banks are partially overhung with Birch, Alder or Willow bushes. Small numbers were recorded at the larger of the Ridge Road ponds but it can be expected that colonisation of the adjacent, renovated pond will take place within the next couple of seasons.

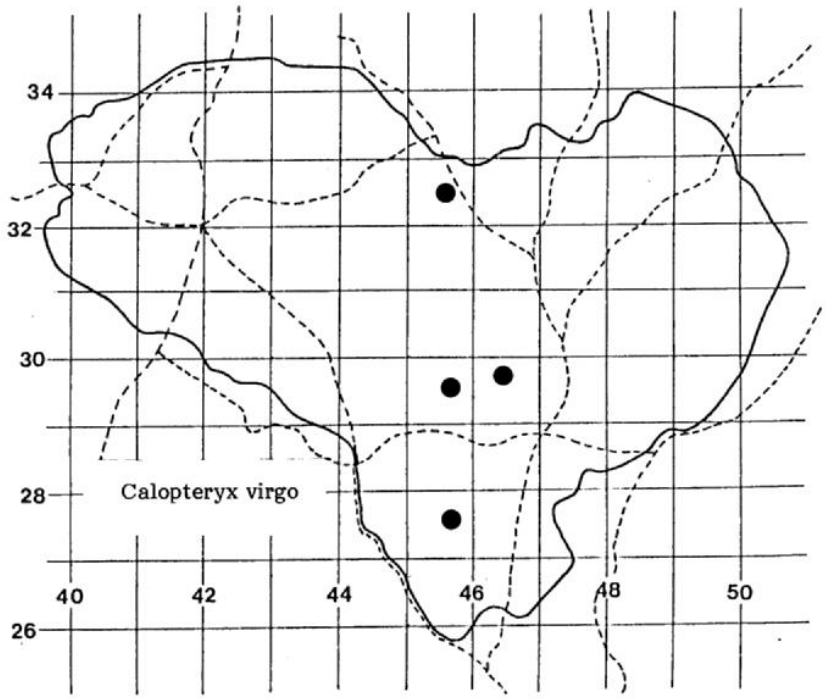
Somatochlora metallica BRILLIANT EMERALD
A nationally scarce species of large wooded lakes with shady banks and probably only a visitor to the Forest during the maturation period. Both sexes, but particularly females, stray far from breeding sites and records in 1972 and 1973 from Old Lodge Bottom presumably relate to individuals from the Pippingford Park lakes. It is worth monitoring site 6.8 in future years for possible colonisation and S. metallica could also feasibly occur on the Ridge Road ponds.

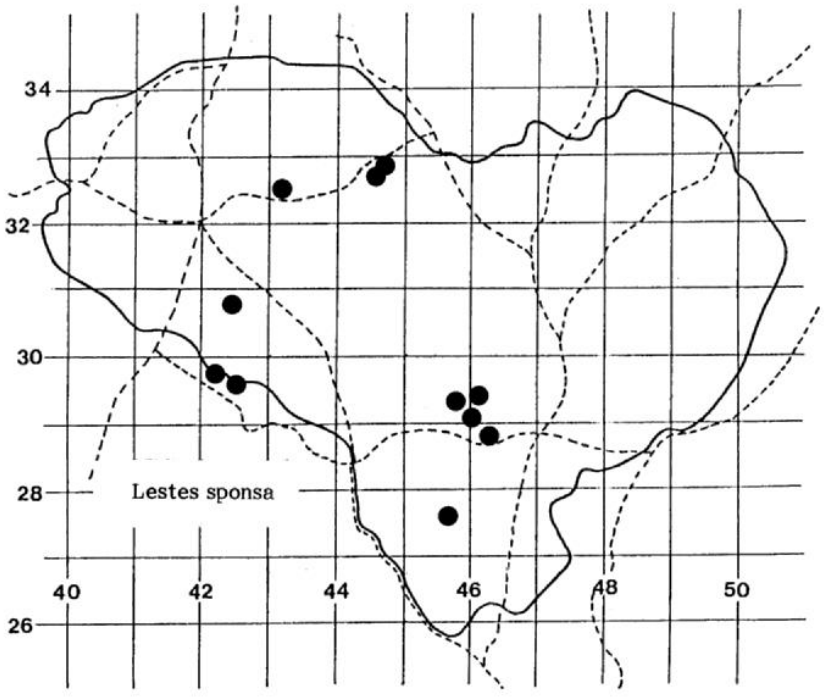
Libellula depressa BROAD-BODIED CHASER
An opportunistic dragonfly, turning up rapidly at any new pond to take up territory. A preference is shown for still-water sites with shallow, muddy banks where several males may repeatedly clash in aerial disputes. As the pond ages and a luxuriant vegetation becomes established L. depressa often abandons the site. These habitat preferences restrict its distribution on the Forest but where it does occur, as at the quarry pond, it can be present in good numbers.

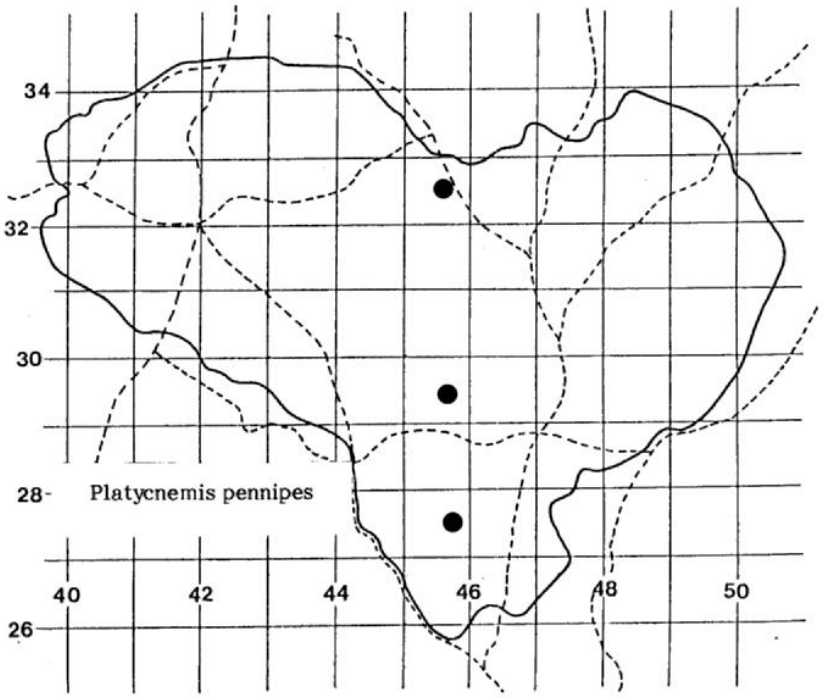
Libellula quadrimaculata FOUR-SPOTTED CHASER
Surprisingly absent as a breeding species on the Forest and the single record, at the Ridge Road ponds in 1981, is considered to relate to an immigrant from the continent. In Sussex as a whole L quadrimaculata is widespread though local but it generally seems to be absent from the High Weald. It is a very characteristic dragonfly of acid ponds and ditches throughout Britain and its absence from the Ashdown Forest, including the private estates is exceptional.

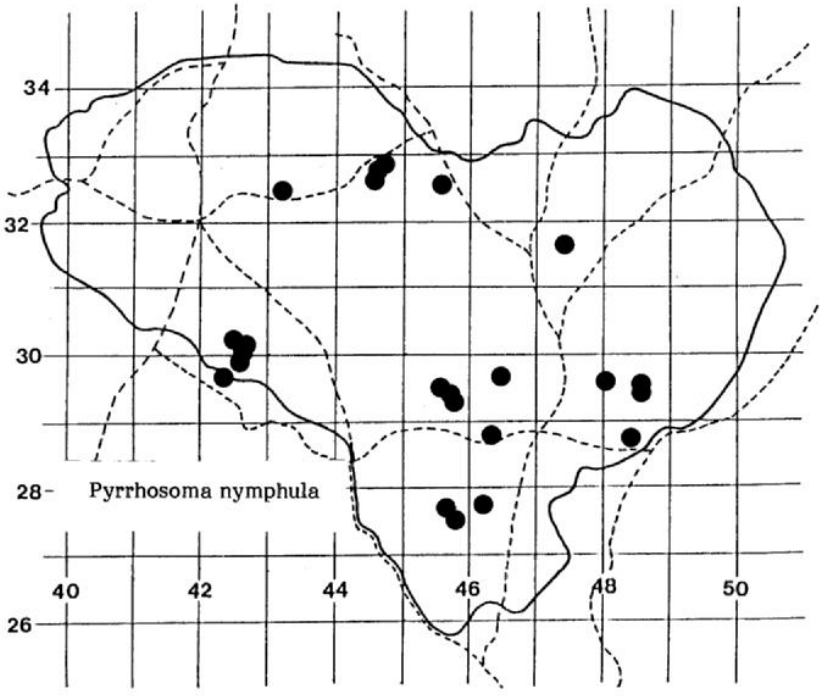
Sympetrum striolatum COMMON DARTER
Widely distributed and occurring in a variety of habitats, adults are also encountered along paths and rides far from water. There will be few sites on the Forest without S. striolatum as it is capable of breeding in small bog pools, ditches, streams and lakes. Populations are regularly swollen by late summer migrants from the continent.

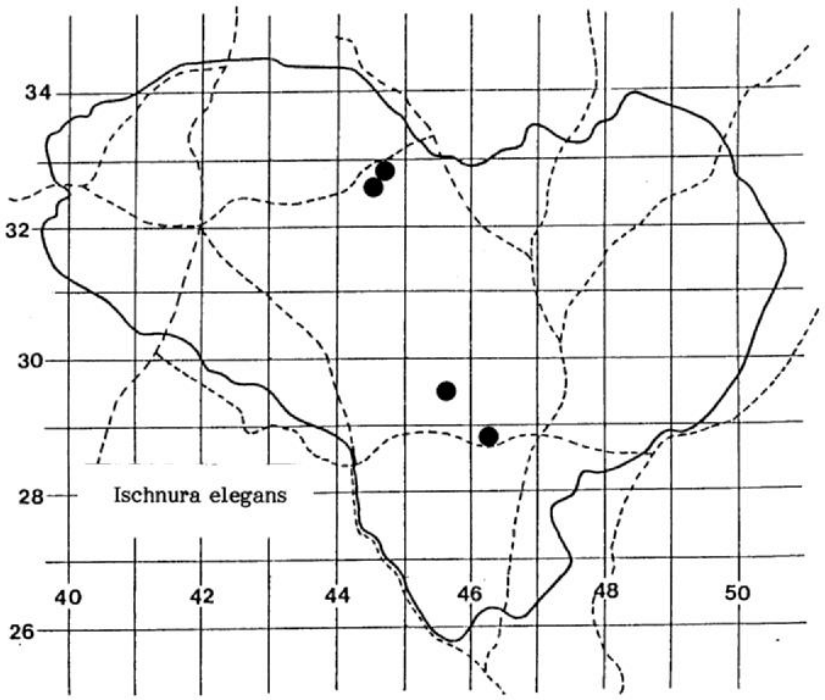
Sympetrum sanguineum RUDDY DARTER
Easily confused with its close relative, S. sanguineum was only discovered on the Forest during the present survey. It is a species of the larger ponds and lakes in sheltered situations and has a close association with tall stands of Typha and Equisetum fluviatile. At the Ridge Road ponds it is much commoner than S. striolatum but there are currently no other suitable sites in the area. It is somewhat surprising that the species has not so far been reported from any of the private lakes within the medieval pale and careful examination should confirm its presence on some of these. S. sanguineum is a regionally notable species which has been declining in many localities and its occurrence on the Forest is noteworthy.

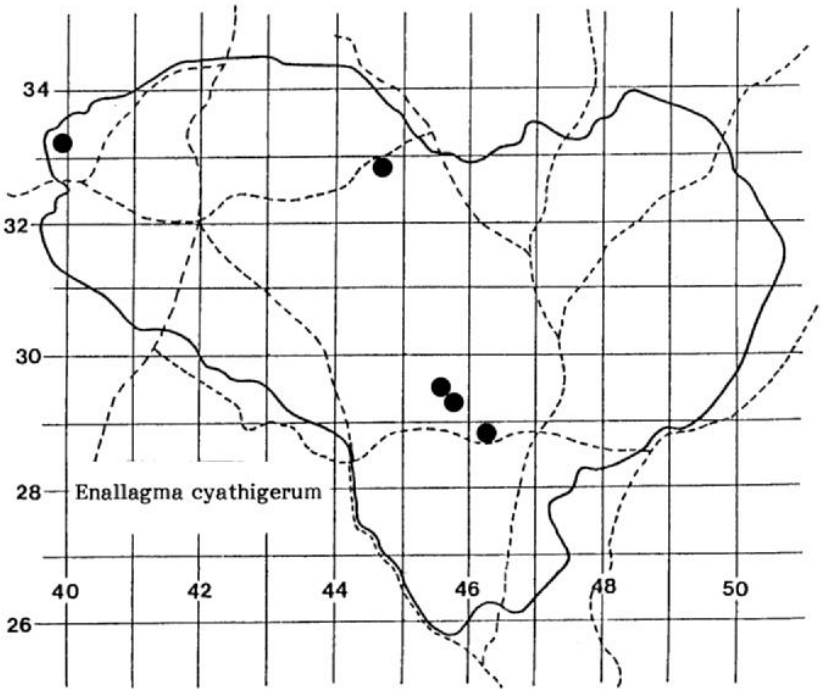

34
32
30
28
26
40
42
44
46
48
50
Calopteryx virgo

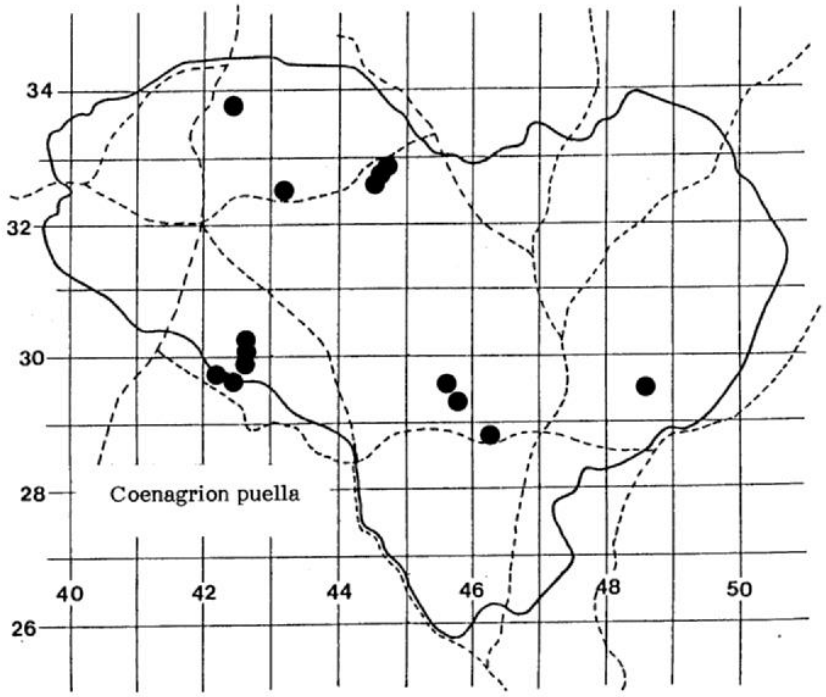

34
32
30
28
26
40
42
44
46
48
50
Lestes sponsa

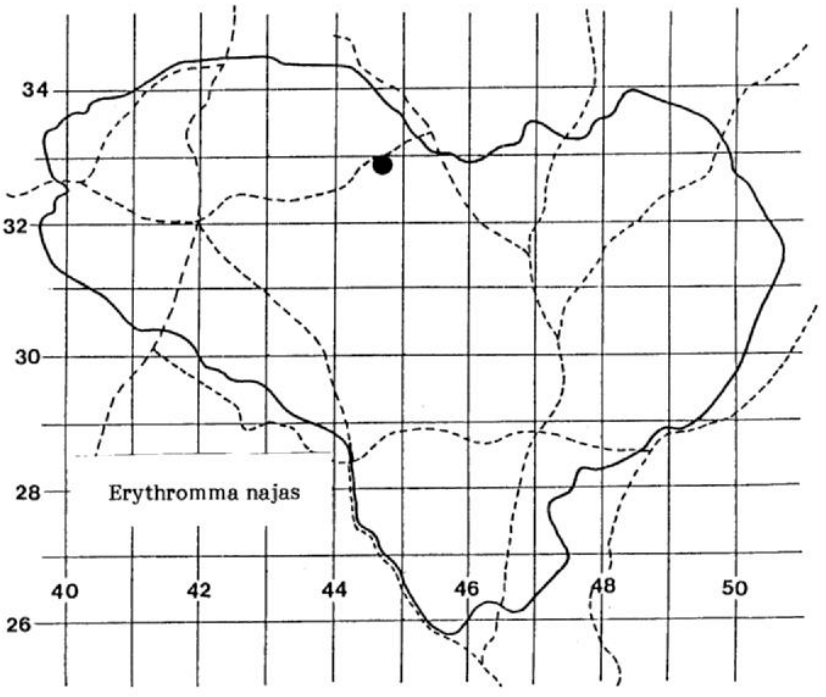

34
32
30
28
Platycnemis pennipes
40
42
44
46
48
50
26

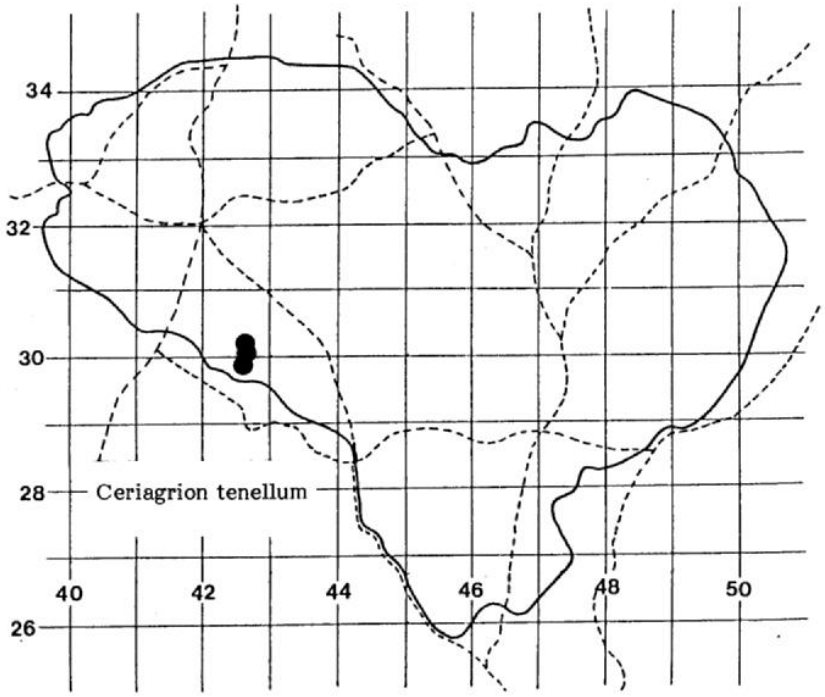

34
32
30
28
Pyrrhosoma nymphula
40
42
44
46
48
50
26

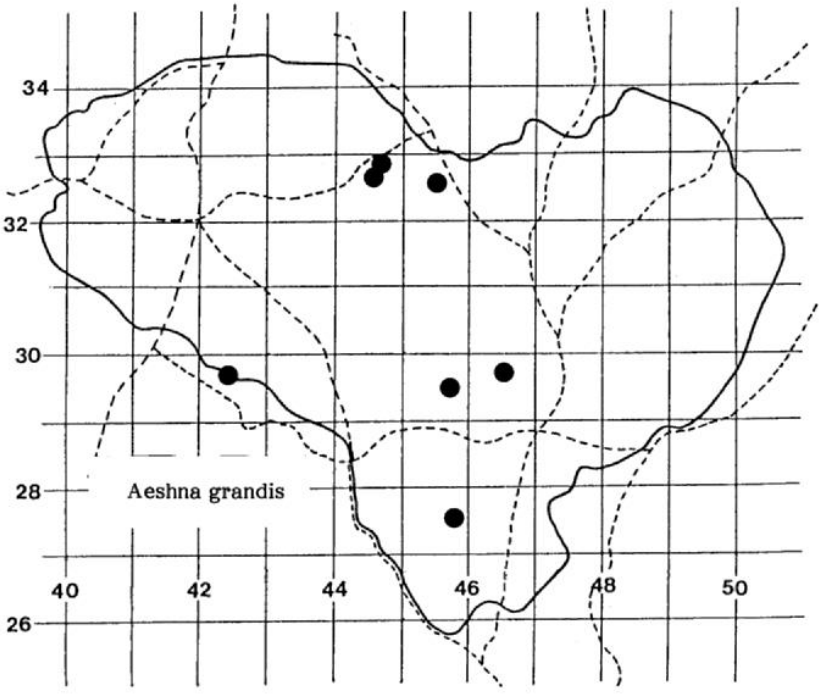

34
32
30
28
26
40
42
44
46
48
50
Ischnura elegans

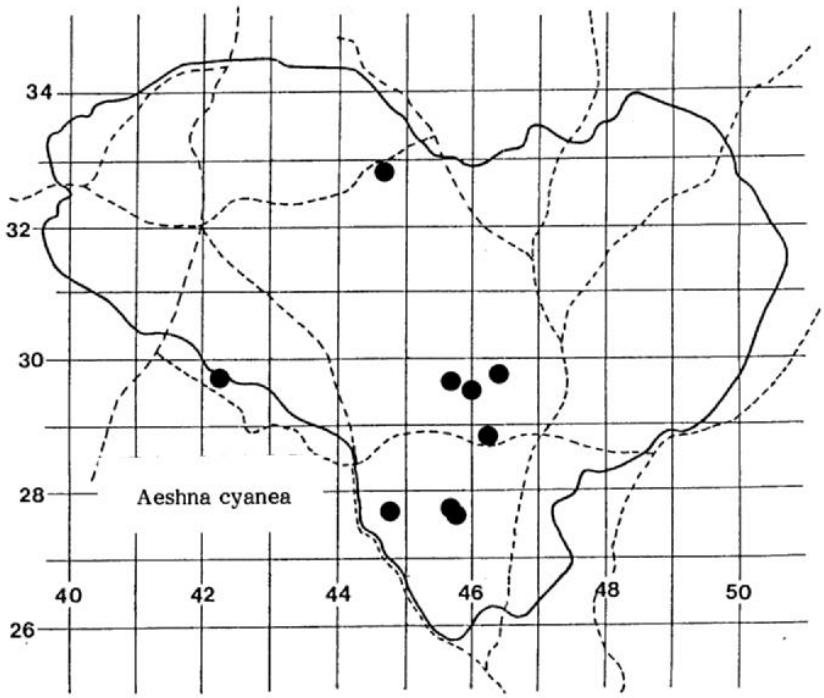

34
32
30
28
26
40
42
44
46
48
50
Enallagma cyathigerum

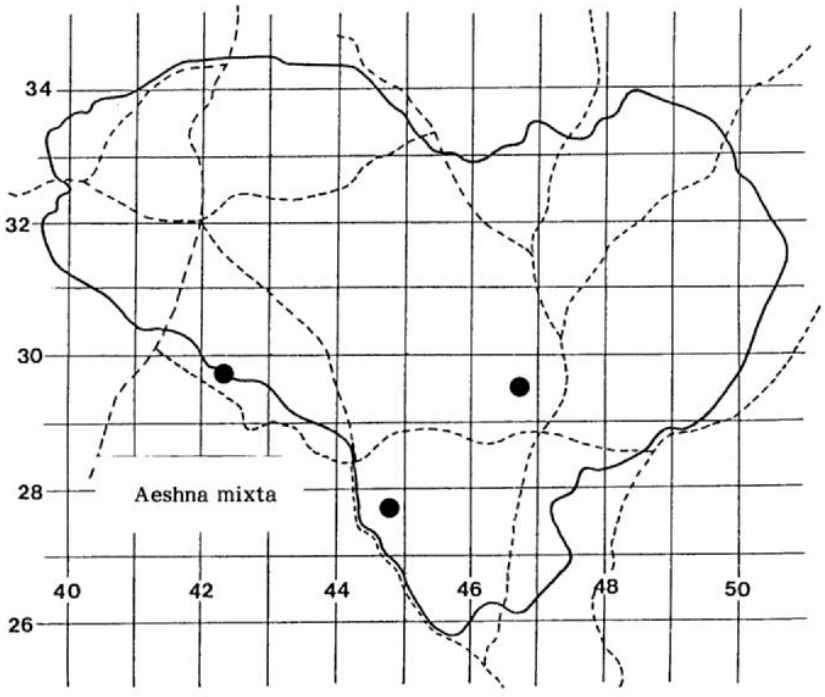

34
32
30
28
26
40
42
44
46
48
50
Coenagrion puella

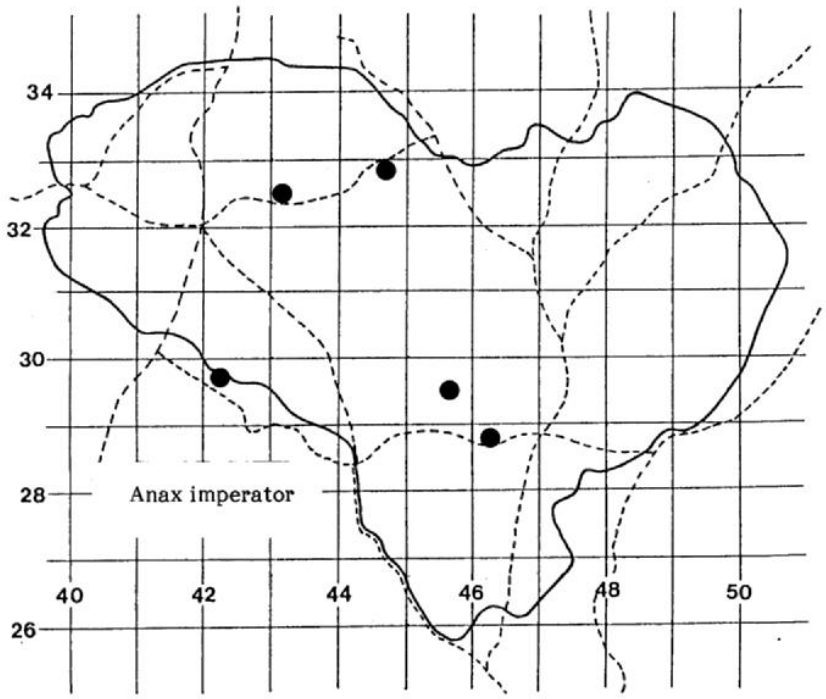

34
32
30
28
26
40
42
44
46
48
50
Erythromma najas

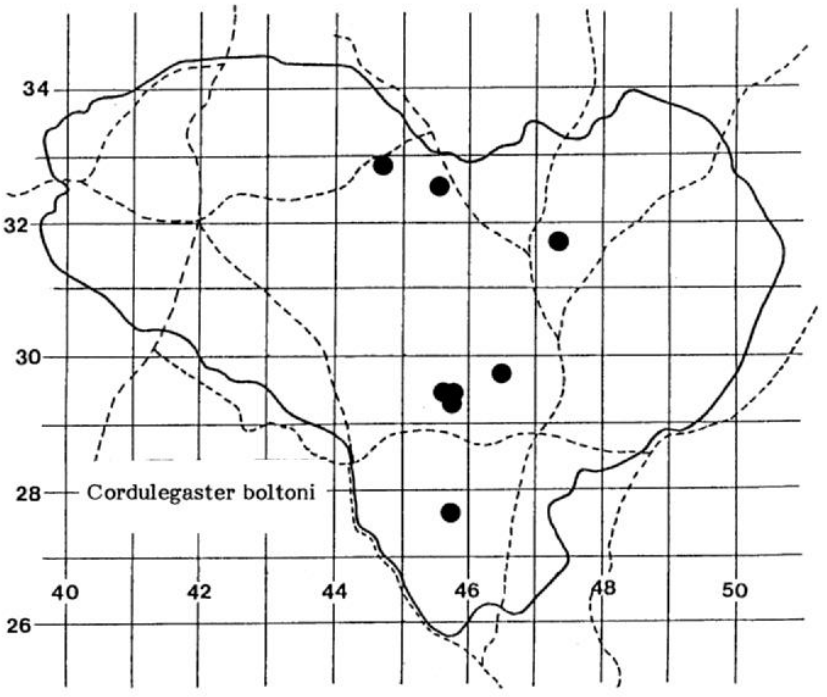

34
32
30
28
Ceriagrion tenellum
40
42
44
46
48
50
26

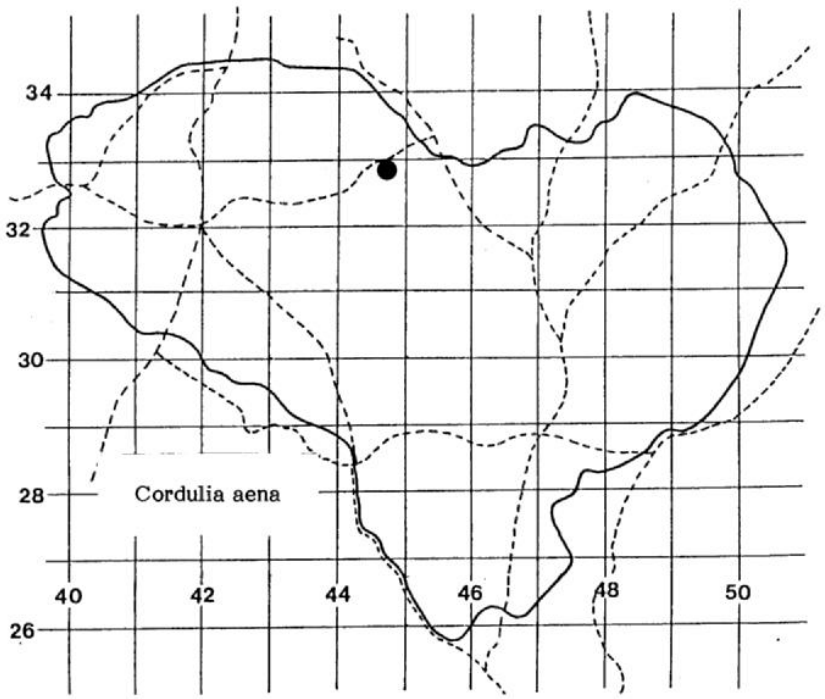

34
32
30
28
Aeshna grandis
40
42
44
46
48
50
26

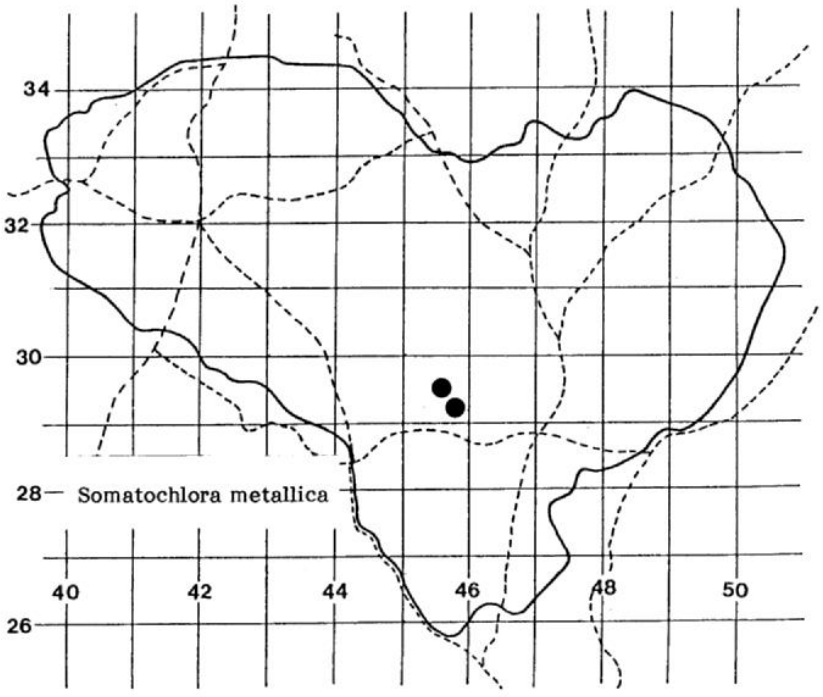

34
32
30
28
26
40
42
44
46
48
50
Aeshna cyanea

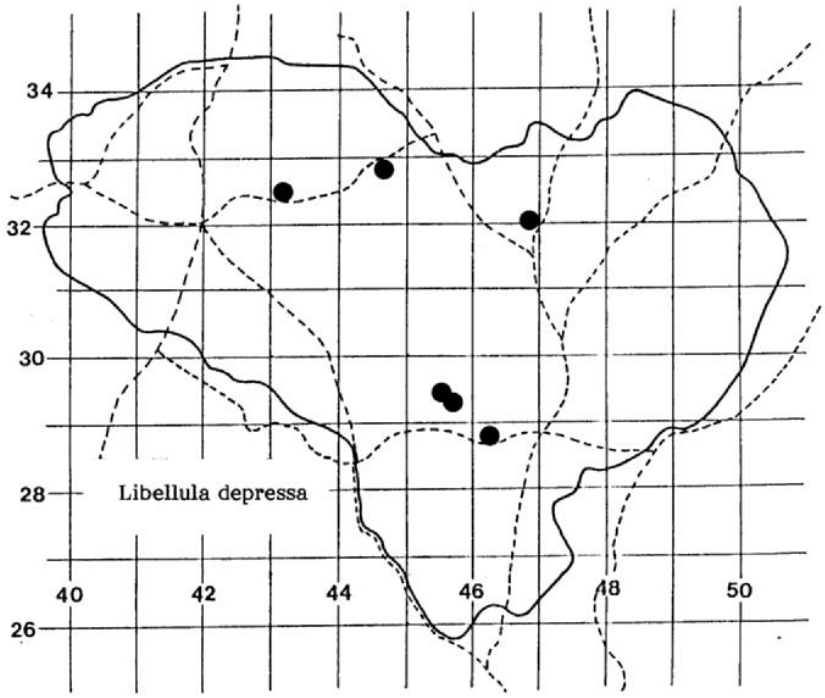

34
32
30
28
26
40
42
44
46
48
50
Aeshna mixta

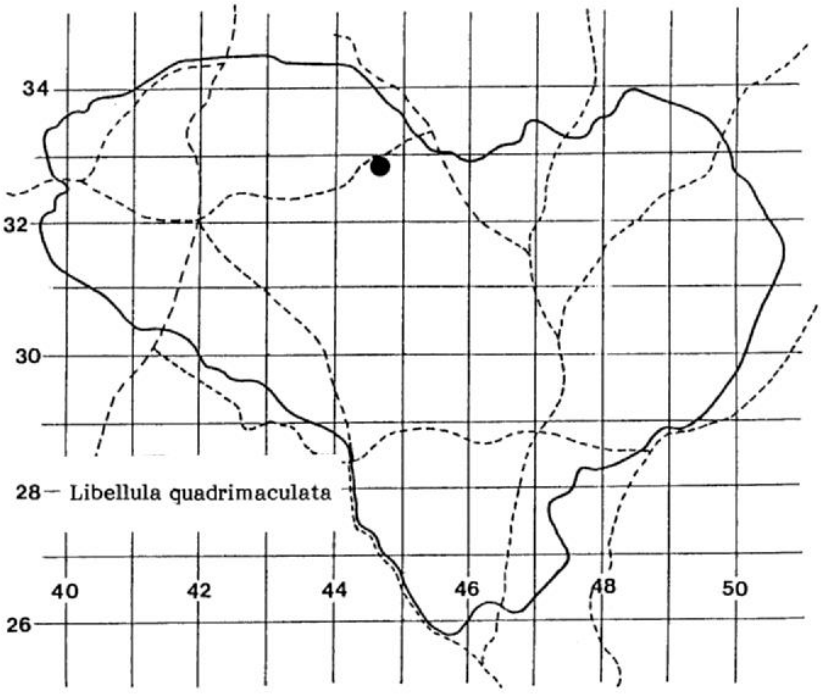

34
32
30
28
26
40
42
44
46
48
50
Anax imperator

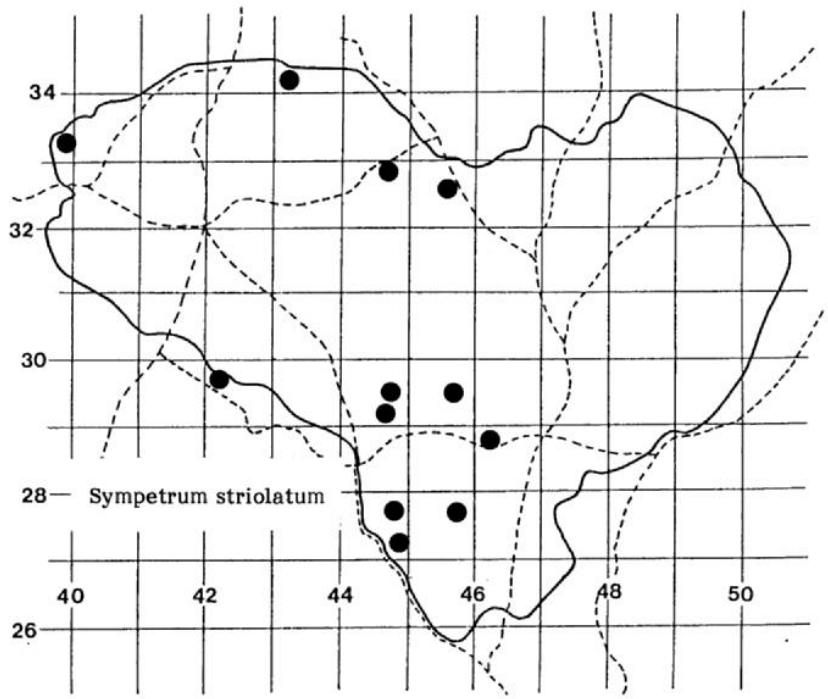

34
32
30
28
26
40
42
44
46
48
50
Cordulegaster boltoni

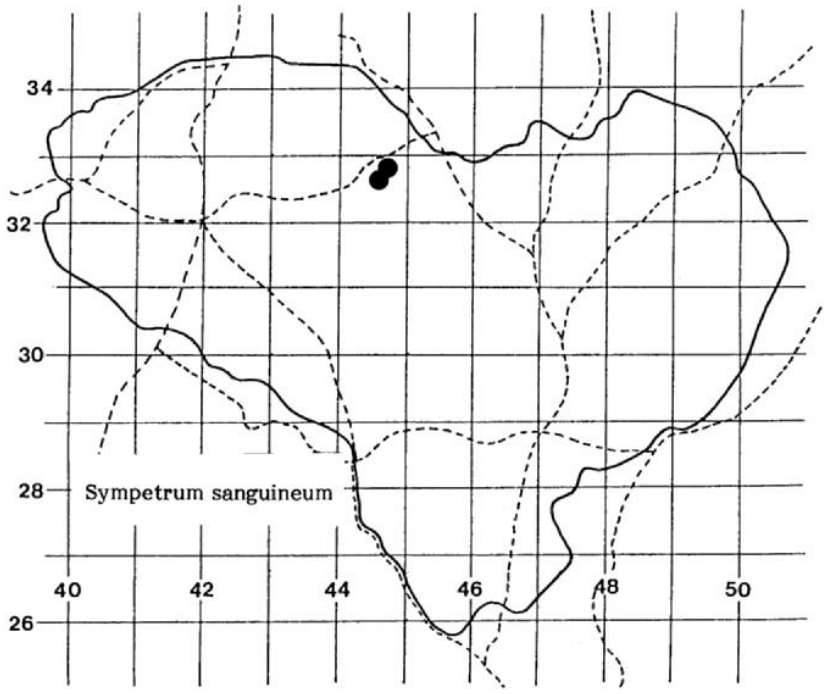

34
32
30
28
Cordulia aena
40
42
44
46
48
50
26


34
32
30
28
Somatochlora metallica
40
42
44
46
48
50
26


34
32
30
28
Libellula depressa
40
42
44
46
48
50
26


34
32
30
28
Libellula quadrimaculata
40
42
44
46
48
50
26


34
32
30
28
Sympetrum striolatum
40
42
44
46
48
50
26


34
32
30
28
Sympetrum sanguineum
40
42
44
46
48
50
26

SITE INVENTORY

During 1985 the author spent fifteen days on the Forest searching for likely dragonfly habitat. Several of these visits were made in conditions unfavourable for insect activity owing to the wet summer experienced and thus many sites were not adequately surveyed for resident Odonata.

Note: After each site name is a six-figure grid reference and, in brackets, the altitude of the locality. Following each site description is a list of all known records for that site, unless otherwise stated these are the author's own observations. The abbreviated species name is followed by the number of adults seen where this is known.

1.1 LAVENDER PLATT 51/399332 (155m a.s.l.)
Small pool (lm x 1/2m) formed on heathland stream where bridleway reduces water-flow. Fringed by tall clumps of Molinia. (21/8/85 - E.c (1), S. st (1)).

1.2 CLAYPITS GATE 51/412339 (100m)
Reasonably large pond (50m x 15m) completely surrounded and over-shaded by broad-leaved woodland. Neglect and the ensuing leaf-fall has resulted in high eutrophication and hence aquatic plants and invertebrates are poor. Conservation measures, at least in the short-term, are not recommended in view of the isolated position of the site, the immensity of the task, and the likelihood of negligible achievements.

2.1 TOMPSET'S BANK 51/424337 (115m)
Shallow pool (20m x 5m) with some aquatic vegetation and sparse emergent vegetation along the banks, and a small central island. Occurs at the edge of the Golf Course and has probably been tidied-up by the ground staff. Unlikely to harbour any interesting species but probably supports depressa, cyanea, elegans, nymphula and other common inhabitants of pools on neutral soils.
(22/8/85 - C.p (1)).

2.2 GOLF COURSE STREAM 51/431339 (70m)
Narrow stream cutting fairly deeply through the fairway and suitable for Odonata for at least 80 metres. Open for most of this length but partially shaded in places by Quercus and Alnus trees. The moderate flow over a mainly gravelly bottom could be suitable for such species as boltoni, virgo, nymphula, striolatum, etc.

2.3 GOLF COURSE STREAM 51/432341 (70m)
Downstream from site 2.2. the stream cuts its way through a heathland remnant on the Golf Course. Abundant emergent and marginal vegetation is established on the sandy bottom of this lO0 metre stretch and a similar fauna to the above could be expected.
(26/8/85 - S. st (1)).

2.4 GOLF COURSE STREAM 51/437341 (75m)
A slow-flowing shallow and muddy section of stream crossing the Golf Course which has been artificially embanked on the eastern side. It is possible that this dries up in more normal summers and could probably only support elegans, puella and striolatum at best.

3.1 FOREST CENTRE 51/431323 (190m)
A recent artificial pond (5m diameter) with plastic liner and planted with abundant Typha, Iris, etc. Although only a couple of years old, at least five species have colonised the site and it is an excellent example of what can be achieved with relatively little effort.
(7/7/85 - P.n (10), C.p (30), L.d (2), A.i (1)
21/8/85 - L.s (1)).

3.2 MIRY GHYLL 51/440326 (145m)
Small pool (2m x 1m) formed in a minor topogenous mire where a streamlet levels out and is crossed by a footpath. This is one of the few open mire habitats, with saturated

Sphagnum and Narthecium amongst Molinia tussocks, that is suitable for Odonata on the Forest. sponsa, striolatum, and nymphula should certainly be present but it is also possible that scarcer species could also occur.

3.3 RIDGE ROAD 51/446328 (137m)

This medium-sized pond (40m x 15m) had become largely unsuitable for Odonata through management neglect, mainly due to over-shading by large Quercus and Fagus trees and the choking of the western half by decaying Typha stems and roots. An initial attempt was made in winter 1984/85 to clear bankside scrub (chiefly Prunus spinosa) and this was completed in July 1985 by a magnificent effort from the Conservation Volunteers in which large quantities of dead Typha were removed and over-hanging branches were lopped off the offending trees. Regular management will continue to be essential at this site but this is crucial in terms of Forest Odonata populations. Seven species are already resident, including sanguineum, and there is no reason why another three or four species could not colonise the pond over the next two or three years.

(28/5/85 - P.n(lO); 7/7/85 - C.p (abundant);
21/8/85 - L.s(3), I.e(1), C.p(5), S.st(1), S.sa(1)
26/8/85 - C.p(4), L.s(2), S.sa(2), A.g(1)).

3.4 RIDGE ROAD 51/446329 (137m)

Shallow depression that usually dries out in summer but retained water this season (6m x 3m). Overhung by Salix bushes and full of Equisetum fluviatile. This site is unlikely to be of any significance to Odonata conservation on the Forest.

(28/5/85 - P.n (2), C.p (1)
7/7/85 - P.n (5), C.p (20)).

3.5 RIDGE ROAD 51/447329 (137m)

Without doubt this is the richest dragonfly site on the Forest and with fifteen species recorded in the last five years it would qualify for SSSI status on its Odonata fauna alone. Significantly, it is the largest body of standing water on the Commons (though see site 6.8) and its 60m x 12m contains numerous habitats for dragonflies. The western half is shaded by Quercus, Fagus and Betula with much open water containing mats of Potamogeton and Nymphaea. The fringes are occupied by stands of Equisetum fluviatile which also extends across the centre of the pond. A few bushes of Salix and Betula overhang the eastern half but the shallow banks here are primarily open to the sun. Dense Typha occupies most of the water area in this half.

The range of ecological niches present at this site enables an unusual diversity of species to breed successfully - shade for C. aenea, shelter for S. sanguineum, tall aquatic vegetation for E. najas, open water for A. imperator, etc. This balance will be an extremely difficult one to maintain but in view of the importance of the site (both aenea and sanguineum are regionally notable) its conservation must be regarded as of the highest priority. One can only ponder how good this site would be if the vast numbers of fish were reduced, (chiefly Golden Orfe Leuciscus idus and Roach Rutilus rutilus)!

It may be wise to consider removing a substantial amount of Typha (up to 50%) next season to keep its spread in check.

(7/7 - 2/9/81 (W J Whitaker) - L.s, P.n, I.e, C.p, A.g, A.c, A.i, C.b, L.d, L.q, S.st.
28/5/85 - I.e (2), C.p (15), P.n (5), C.a (3)
7/7/85 - C.p (abundant), P.n (10), I.e (2), L.s (1), E.n (3), A.i (2).
28/7/85 - I.e (4), C.p (3), E.n (1).
21/8/85 - C.p (6), E.c (1), L.s (1), A.g (2), A.i (1), S.st (2) S.sa (10).
25/8/85 - I.e (2), L.s (2), C.p (5), E.c (1), A.g (1), A.c (1) S.sa (12).
26/8/85 - C.p (4), L.s (1), S.sa (9)).

4.1 NEWBRIDGE 51/455324 (75m)

A narrow stream, sandy-bottomed in places, flowing alongside damp Alnus woodland which overshades the stream for most of its length. The weir which dams the junction of the two streams meeting here broadens the water surface and reduces flow. Below the weir the stream resumes its course along a more rocky bed with some Ranunculus (Batrachium) sp.

This is a major breeding site for virgo on the Forest, and presumably boltoni also. The presence of single individuals of pennipes alongside the stream in two successive years is of interest but probably relates to wandering individuals from Pippingford Park.
(Undated (R Tallack) - P.n
August 1983 (R Tallack) - P.p (1)
10/8/84 (R Tallack) - P.p (1), A.g, S.st 17/7/85 - C.v (5), C.b (1)).

4.2 QUARRY POOL 51/469320 (195m)
Fairly large (20m x 12m) but shallow pond in the centre of a quarry used for building stone in the 1860s. The water is apparently permanently muddy due to run-off from the quarry slopes and the banks are largely bare except for tussocks of Juncus effusus, particularly along the northern side.
(7/7/85 - L.d (6)).

4.3 WREN'S WARREN 51/473317 (162m)
The upper reaches of the stream where the banks are not completely overhung by Betula and Salix provide suitable breeding habitat for boltoni and other common stream dwellers, whilst one level section below the fire-break has a 50m length of valley mire with Narthecium locally frequent over Sphagnum spp amongst tussocky Molinia and Juncus acutiflorus. This mire should almost certainly support sponsa and possibly other more characteristic bog-dwellers.
(21/6/81 (W J Whitaker) - P.n, C.b).

5.1 JINK'S HOLE 51/499325 (75m)
Formed within the pond bay of the Tudor Forge at Crowborough Warren, this area of reduced flow on one of the Forest's larger streams is possibly suitable for a small number of dragonflies, although species diversity is likely to be poor - striolatum, virgo, and nymphula are the most probable inhabitants.

6.1 ISLE OF THORNS 51/421309 (175m)
Another section of valley mire in an interesting area of heath where the stream flows through Molinia tussocks forming several small pools. The western bank is composed of a dense Pteridium stand which partially shades the water-course and a return to more open vegetation by judicious management would be beneficial. In view of the proximity of the exceptionally rich pool within the enclosed land of the Isle of Thorns, this stream is likely to be frequented by Somatochlora metallica and could provide breeding habitat for Orthetrum coerulescens and other mire species.

6.2 ISLE OF THORNS 51/424308 (185m)
One of several pools on the heathland east of the Isle of Thorns enclosure which probably originated as bomb craters and usually dry out in summer - as indicated by clumps of Molinia and J. acutiflorus which would provide emergence sites for Odonata. Attempts to improve the retaining abilities of these pools would prove most worthwhile.
(26/8/85 - L.s (1)).

6.3 CHELWOOD HEATH 51/424301 (165m)
Small pool (3m diameter) within a soligenous flush amongst Molinietum. There is very little open water as the pool is almost completely covered by Sphagnum with abundant Narthecium ossifragum. Lower down the flush appears to be permanently waterlogged and careful excavation could create valuable breeding conditions for tenellum which is currently restricted to three small pools nearby.
(7/7/85 - P.n (1)).

6.4 CHELWOOD HEATH 51/425300 (160m)

One of a series of three small pools (presumably bomb craters) which provide the only known locality for tenellum in East Sussex. This one is 2 - 3 metres in diameter with a sparse fringe of Juncus effusus surrounding open water.

(7/7/85 - C.p (3), P.n (2), C.t (1)).

6.5 CHELWOOD HEATH 51/425300 (160m)

As above, but this pool has a colonising fringe of Sphagnum.

(7/7/85 - C.p (10), P.n (5), C.t (7)).

6.6 CHELWOOD HEATH 51/425299 (155m)

As above, but slightly larger. A carpet of Sphagnum covers the shallow western half of the pool whilst Juncus effusus and Eriophorum angustifolium emerge from the deeper, open water. This site is probably the stronghold of tenellum on the Forest. A heath-fire a few years ago temporarily removed the threat of shading by Betula scrub and it is imperative that regeneration is closely regulated. C. tenellum favours low scrub in the vicinity of its breeding habitat for shelter but this should not be allowed to cast shade upon the pool.

(July 1984 (R Tallack) - C.t (6)
7/7/85 - C.p (10), P.n (8), C.t (10)
12/7/85 - (R Tallack) - P.n, C.t (6)).

6.7 CHELWOOD SWAMP 51/422296 (140m)

Silting of this former large pool has resulted in very shallow water with a thick tangle of various Gramineae. Some patches of open water remain but the site is heavily shaded by the surrounding tree cover and in its current state the pool is of little value to dragonflies, although common species such as nymphula, puella and striolatum could be present in small numbers. It is probably a more important conservation priority to maintain the deciduous woodland in the area although if the site could be restored it would provide a useful complement to the adjoining area.

6.8 CHELWOOD DAM 51/423296 (140m)

Following extensive management over the past two years in which bankside trees and scrub were removed and the dam was restored, this has become the largest area of open water on the Forest (80m x 40m) and should eventually prove to be of great value to local Odonata populations. Currently it is rather bare with only minimal colonisation by aquatic vegetation and few emergence sites but it will surely only be a matter of a couple of seasons before the habitat becomes ideal for many species.

(7/7/85 - C.p (2), A.i (1))

6.9 CHELWOOD GATE 51/422295 (150m)

A very shallow pool (6m x 4m) which almost completely dries up in summer, probably a former clay-pit. The western edge grades into a Juncus effusus marsh over Sphagnum whilst the centre is filled with Juncus bulbosus and Potamogeton sp.

(27/7/84 - L.s (15)
7/7/85 - L.s (10), C.p (20)
17/8/85 (R Tallack) - L.s, A.m, S.st)

7.1 MILLBROOK 51/447294 (lO0m)

Fairly fast-flowing stream overhung with mature Alnus trees for most of its course. Where the bridleway crosses the Millbrook there are some short, open stretches but bankside vegetation is poor due to 'poaching' by horses. C. virgo and C. boltoni could be present in the area.

(21/8/85 - S.st (1)).

7.2 MILLBROOK POOL 51/446292 (lO0m)

Along the footpath on the western side of the Millbrook, 50m north of the footbridge, is a shallow, sheltered pool about 3m x 2m. This is half-filled with Sphagnum and could provide breeding conditions for tenellum. At least nymphula and sponsa should be resident.

7.3 MILLBROOK 51/446292 (l00m)

Leading down to the footbridge on the west side of the brook, gully erosion has created several small rivulets which are shallowly ponded at intervals, particularly in the deeper ruts. Unlikely to be of any significance to dragonfly conservation on the Forest.
(21/8/85 - S.st (2)).

8.1 OLD LODGE STREAM 51/457294 (120m)

A shallow, swift-flowing stream on the boundary of the Forest with a few small pools. For much of its course the stream runs through a wooded valley which overshades the watercourse with Fagus, Quercus and Alnus trees. This wooded cover may be of value for Somatochlora metallica but it would be advisable to ensure that a proportion of the Forest bank is kept open to sunlight.
(1972 (D G Chelmick) - C.v, C.p, E.c, I.e. P.n, P.p, A.c, A.g, A.m, A.i, S.st, C.b, L.d, S.m.
1973 (D G Chelmick) - P.n, C.b, S.m.).

8.2 CAMP HILL STREAM 51/458293 (125m)

Heathland stream with moderate flow, ponded in places amongst Molinia tussocks and where it enters the Salix carr at the bottom of the valley there is a deep pool (4m x 3m) which is bare of aquatic vegetation but has emergent Juncus effusus.
(13/7/85 - P.n, (30), L.s (1), C.b (2)).

8.3 CAMP HILL POOL 51/458292 (170m)

Reported as "a heathy pond in the Duddleswell Valley" but not visited during the survey. Roger Tallack has located a pool at 51/457291 which is completely surrounded by mature Betula scrub but whether these are one and the same pool is uncertain.
(1973 (D G Chelmick) - C.p, E.c, P.n, C.b, L.d, S.m.).

8.4 CAMP HILL POND 51/460293 (135m)

A muddy pond, 4 metres in diameter, fringed with Molinia and Juncus effusus but without aquatic vegetation. A large Salix bush overhangs the south-western side. Dolomedes fimbriatus is common,
(24/8/85 - L.s (10), A.c (1)).

8.5 ELLISON'S POND 51/462287 (155m)

The most accessible, and hence popular, dragonfly site on the Forest and therefore of great importance despite its lack of uncommon species. This artificial pool (20m x 10m) has abundant emergent and aquatic vegetation including Equisetum, Sparganium, Potamogeton, Juncus, etc. The northern and eastern corners have flat areas of bare mud, probably kept open by thirsty horses, and a couple of Salix bushes overhang the bank in places. Adjacent scrub provides shelter for imagines in poor weather.
(30/6 - 2/9/81 (W J Whitaker) - L.s, P.n, I.e, E.c, C.p, A.c, A.i, L.d, S.st.
11/7/81 (H C Eve) - L.s, P.n, I.e, E.c, C.p, L.d,
18/9/81 (H C Eve) - L.s (4), A.c (1).
1/7/83 (J Steer) - P.n, A.i, L.d.
19/7/83 (J Steer) - I.e, E.c, C.p, A.i.
9/8/83 (J Steer) - L.s, A.i.
27/7/84 - L.s (30), P.n (50), E.c (50), C.p (20), L.d (2), A.i (3).
28/5/85 - P.n (30), L.d (3), C.p (2).
7/7/85 - P.n (10), C.p (50), L.d (2), A.i (1).
13/7/85 - P.n (10), C.p (100), L.d (6), A.i (2).
12/8/85 (R Tallack) - L.s, E.c, A.c, S.st.
24/8/85 - C.p (10), L.s (20), I.e (5), A.i (1), S.st (15)).

8.6 GARDEN OF EDEN 51/464297 (130m)

Heathland stream, relatively fast-flowing, which has cut its way through the Ashdown sandstone forming small gullys over bare rock. In the upper reaches it is ponded amongst tussocky Molinia but there is little emergent vegetation. Unlike many Forest streams the banks are mainly clear of Salix and Betula bushes and despite the high

acidity of the watercourse this is a very suitable locality for Odonata.
(15/8/82 (R Tallack) - C.v, A.g, C.b.
13/7/85 - P.n (5), C.b (1)).

8.7 BOG POOL 51/467297 (150m)
8.8 BOG POOL 51/467297 (150m)
8.9 BOG POOL 51/467297 (150m)

This series of small pools situated on the soligenous mires of Camp Hill have not apparently yielded any Odonata records. They are on a rather exposed situation but otherwise their wealth of bog plants and Sphagna would suggest their suitability for seepage species like tenellum and other commoner dragonflies. They are noted for the presence of Menyanthes trifoliata and Anagallls tenella.

8.10 CAMP HILL POOL 51/470294 (170m)

A heathland pool (6m x 3m) in an exposed situation with no aquatic or emergent vegetation and only a sparse fringe of Juncus effusus clumps. In normal seasons this pool dries out completely by mid-summer and in its present state is therefore of minimal value to the Forest's Odonata.
(24/8/85 - L.s (1)).

9.1 POUNDGATE STREAM 51/484294 (130m)

East-flowing stream, relatively deep, running through dense stands of Juncus effusus and Molinia. Probably occupied by many of the common Forest species.
(20/7/85 - P.n (4)).

9.2 POUNDGATE STREAM 51/484294 (130m)

A heathland stream with a moderate flow and where the bridleway crosses it there is a marshy area with much Juncus effusus which looks very suitable for a range of the commoner species.

9.3 POUNDGATE STREAM 51/485294 (130m)

Shallow heathland stream, overgrown with Salix and Betula bushes for most of its length but where the banks have been cleared to form part of the firebreak the open conditions are suitable for several species and both virgo and boltoni could feasibly occur.
(20/7/85 - P.n (6), C.p (1)).

9.4 POUNDGATE POOL 51/483287 (150m)

Shallow pool (3m x 2m) formed on the stream-line amongst Molinia tussocks. Abundant Juncus bulbosus across the pool and overhung by a Salix cinerea bush on one side. Probably capable of supporting a diverse dragonfly fauna.
(20/7/85 - P.n (6)).

9.5 POUNDGATE POOL 51/482286 (155m)
9.6 POUNDGATE POOL 51/482286 (155m)

Two small rectangular pools amongst mature Calluna heath, both of which are filled with Juncus bulbosus. Their most likely origin is as trenches dug for rifle-training in this area during World War I. The habitat would appear suitable for tenellum.

9.7 POUNDGATE 51/480286 (160m)

An interesting site where a minor stream crosses an extensive seepage. The abundant Sphagnum with Drosera rotundifolia and Narthecium ossifragum merges into a dense stand of Juncus acutiflorus and the whole of this flush is worthy of further investigation. As one of the few open seepages on the Forest it merits attention as perhaps providing breeding conditions for tenellum and coerulescens with other common species.
(20/7/85 - P.n (2))

10.1 H0UGH GROUND 51/448277 (80m)

Small stream thickly overhung with Quercus and Alnus trees which is open for some 10 - 15m where a firebreak and bridleway crosses it. Unlikely to be of any significance for

Odonata.
(26/8/85 - A.c (1), A.m (1), S.st (1)).

10.2 CHESTNUT FARM 51/449272 (65m)

A short section of fast-flowing stream with a gravelly bottom, open to the sun for about 4 metres as it emerges from the valley woodland. Possibly suitable for nymphula, striolatum, etc.
(26/8/85 - S.st (2)).

11.1 DUDDLESWELL POOL 51/462279 (125m)

Small pool (2 metres diameter) on the slopes of the Duddleswell Valley. There is abundant Sphagnum cover with emergent Juncus effusus.

11.2 DUDDLESWELL POOL 51/461278 (120m)

A square pool, *2m* x *2m,* with very steep sides and little aquatic or emergent vegetation.
(28/5/95 - P.n (1)
7/7/85 - P.n (1)).

11.3 DUDDLESWELL POOL 51/462277 (100m)

A rather deep, roughly circular, pool (2 metres diameter) at the edge of a regular footpath across the heath. Trampling and surface-water erosion has resulted in peaty banks with sparse Molinia and the pool is usually muddy following rain. Unidentified Anisopteran larvae have been found here (R Tallack).

11.4 DUDDLESWELL STREAM 51/457276 (85m)

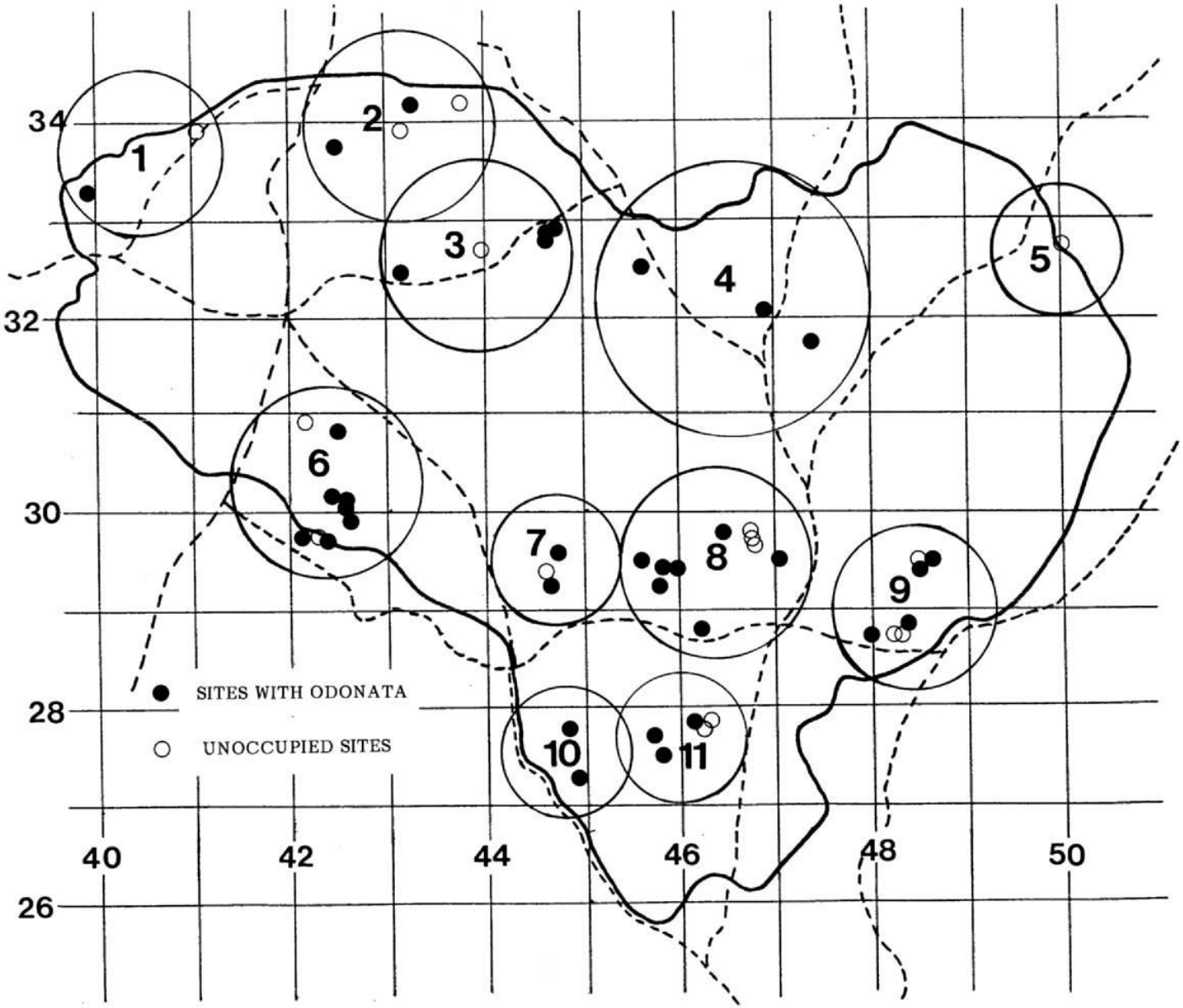
Although this stream is flanked by birchwood for much of its length there are a couple of level, marshy stretches where the flow is sluggish through Juncus and Molinia tussocks. Conditions here are favourable for most of the Forest's stream-dwellers.
(6/6/82 (R Tallack) - C.v, P.n.
11/8/84 (R Tallack) - L.s, P.n.
25/8/84 (R Tallack) - A.c, S.st).

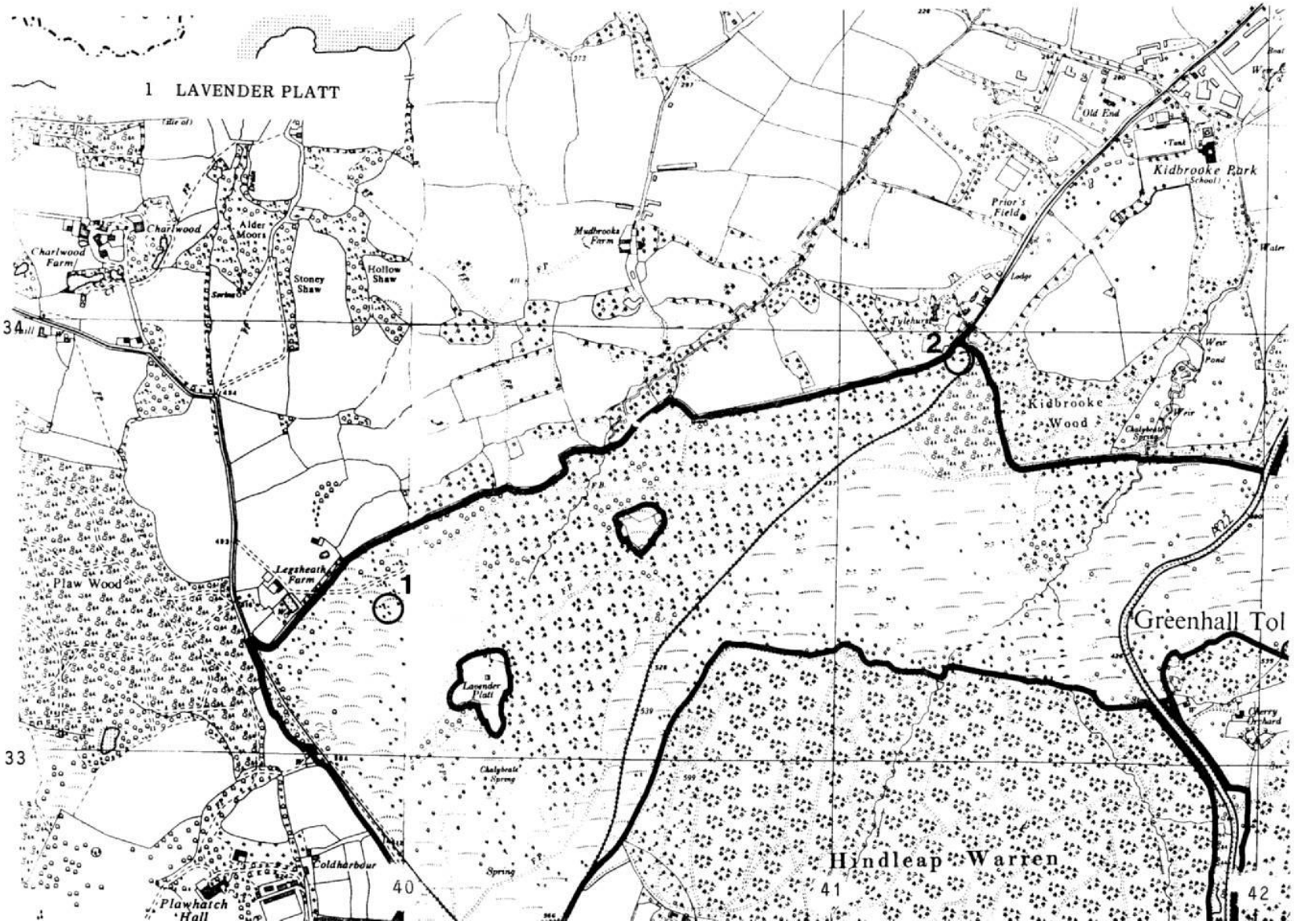
11.5 DUDDLESWELL STREAM 51/457274 (67m)

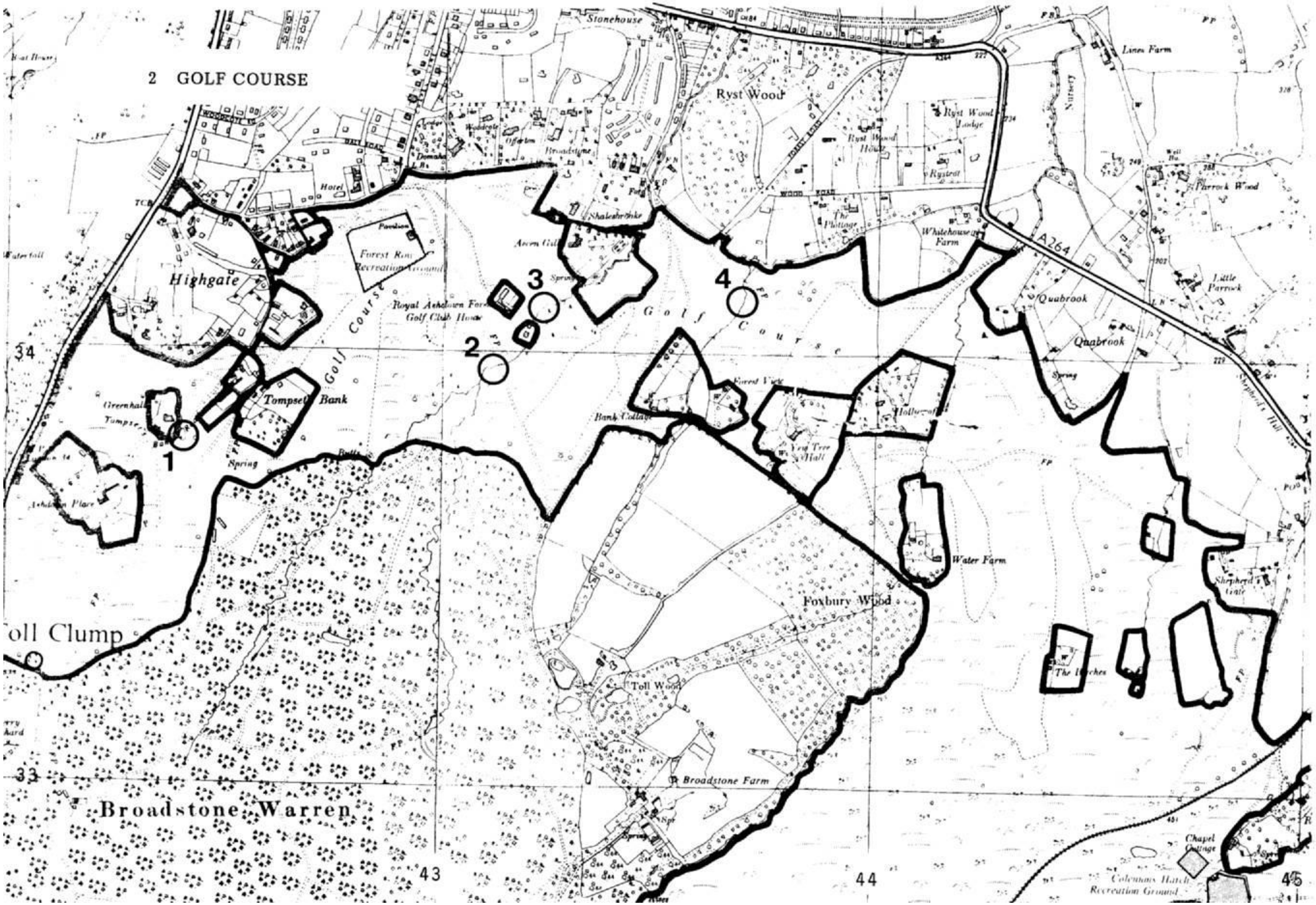
A ponded section of heathland stream, similar to the previous site but the broader basin and sheltered situation provides ideal conditions for Odonata amongst the mire communities and stream-course. A sparse carr of Betula and Salix should be managed to restrict encroachment, particularly as this is also a haunt of Dolomedes fimbriatus and a former site for Hammarbya paludosa.
(August 1981 (R Tallack) - P.p (1).
25/8/84 (R Tallack) - A.c (1).
28/5/84 - P.n (40).
7/7/85 - P.n (3)).

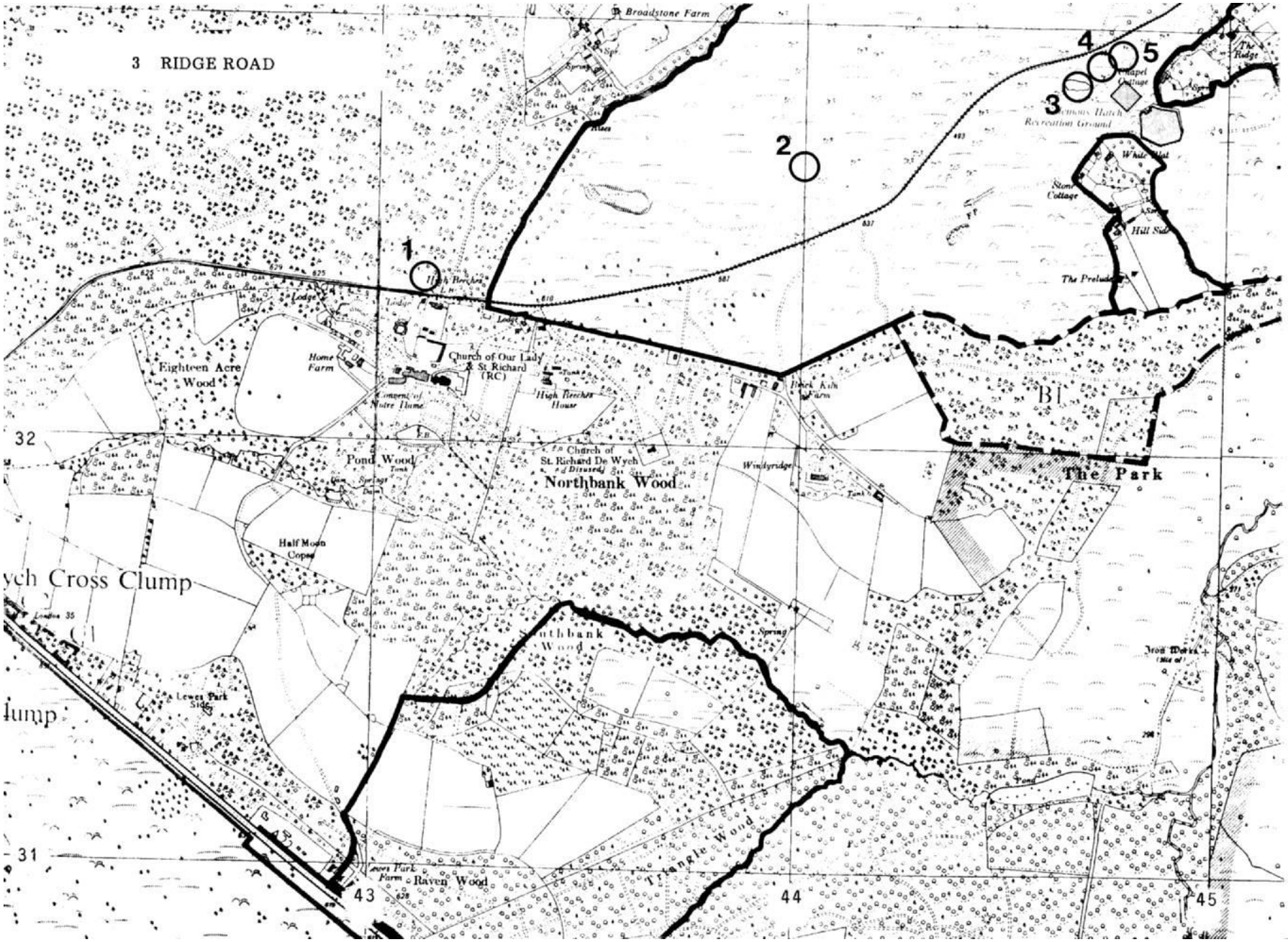
SITE \ SPECIES	SITE/SPECIES RECORDS																				TOTAL
	C.v	L.s	P.p	P.n	C.p	E.n	I.e	E.c	C.t	A.g	A.c	A.m	A.i	C.b	C.a	S.m	L.d	L.q	S.st	S.sa	
1.1								/											/		2
2.1					/																1
2.3																			/		1
3.1		/		/	/								/				/				5
3.3		/		/	/		/			/									/	/	7
3.4				/	/																2
3.5		/		/	/	/	/	/		/	/		/	/	/		/	/	/	/	15
4.1	/		/	/						/				/					/		6
4.2																	/				1
4.3				/										/							2
6.2		/																			1
6.3				/																	1
6.4				/	/				/												3
6.5				/	/				/												3
6.6				/	/				/												3
6.8					/								/								2
6.9		/			/							/							/		4
7.1																			/		1
7.3																			/		1
8.1	/		/	/	/		/	/		/	/	/	/	/		/	/		/		14
8.2		/		/										/							3
8.3				/	/			/						/		/	/				6
8.4		/									/										2
8.5		/		/	/		/	/			/		/				/		/		9
8.6	/			/						/				/							4
8.10		/																			1
9.1				/																	1
9.3				/	/																2
9.4				/																	1
9.7				/																	1
10.1											/	/							/		3
10.2																			/		1
11.2				/																	1
11.4	/	/		/							/								/		5
11.5			/	/							/										3
TOTAL	4	10	3	22	14	1	4	5	3	5	7	3	5	7	1	2	6	1	13	2	
	virgo	sponsa	pennipes	nymphula	puella	najas	elegans	cyathigerum	tenellum	grandis	cyanea	mixta	imperator	boltoni	aenea	metallica	depressa	quadrimaculata	striolatum	sanguineum	

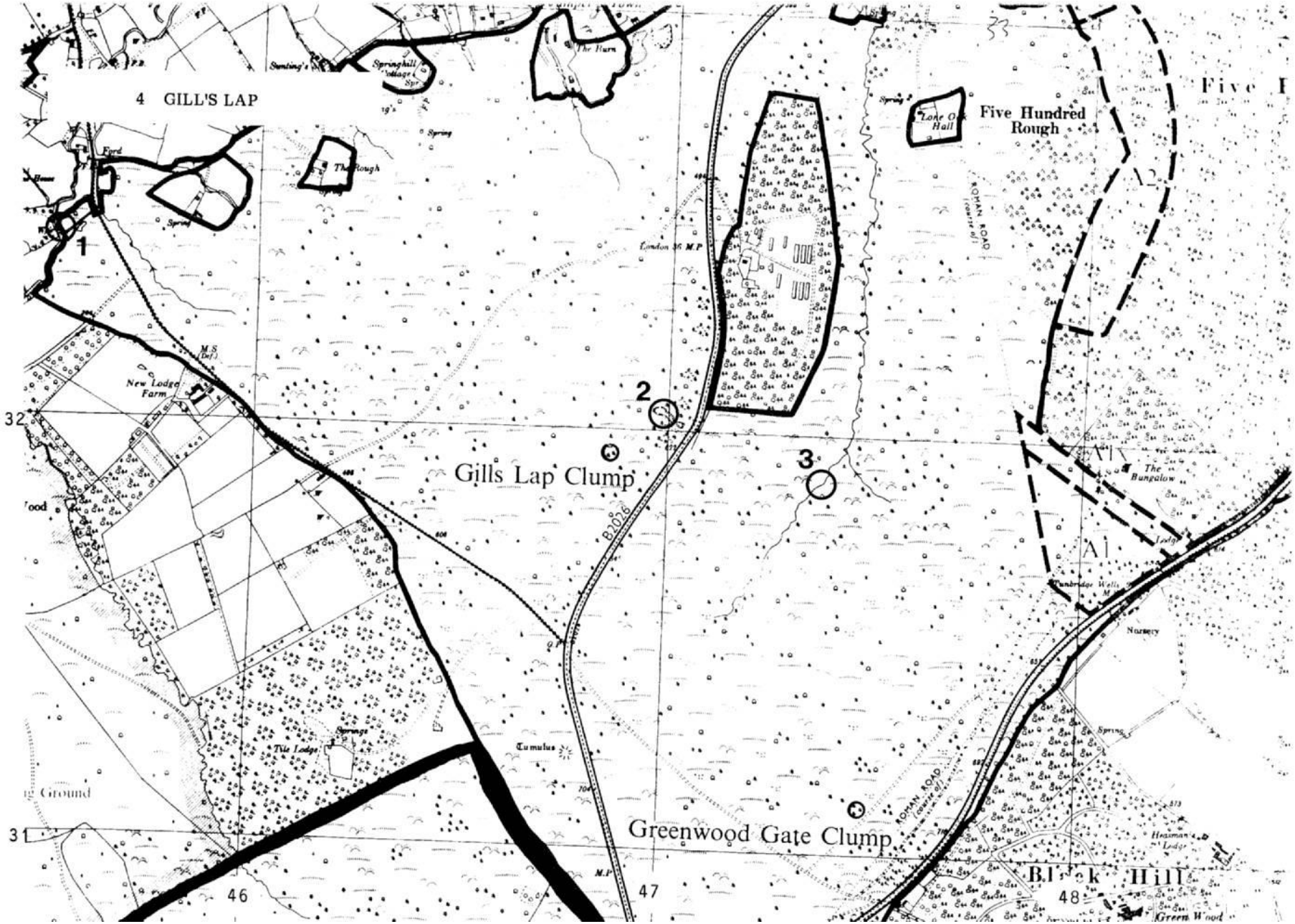
SITE AGGREGATES.

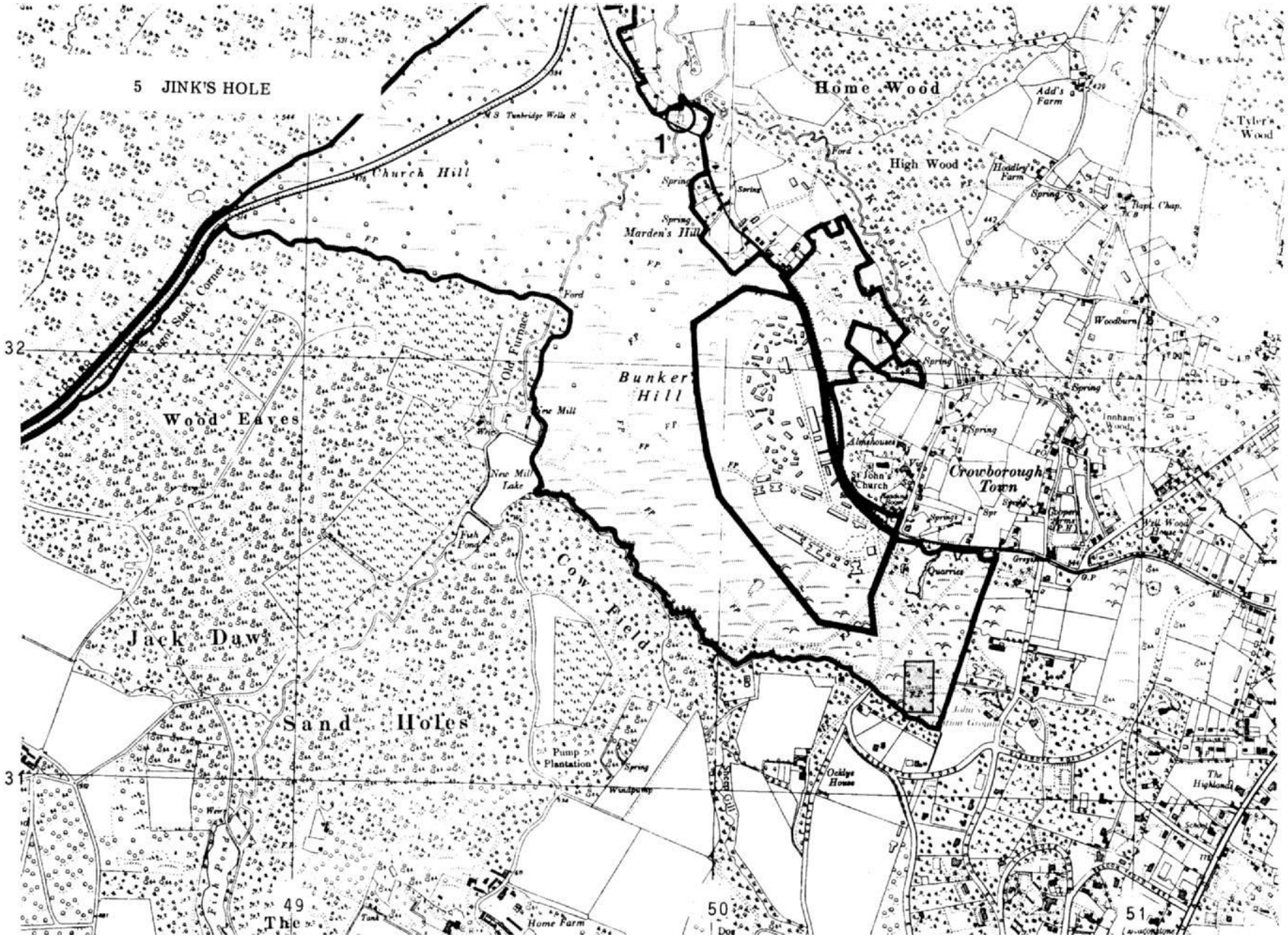


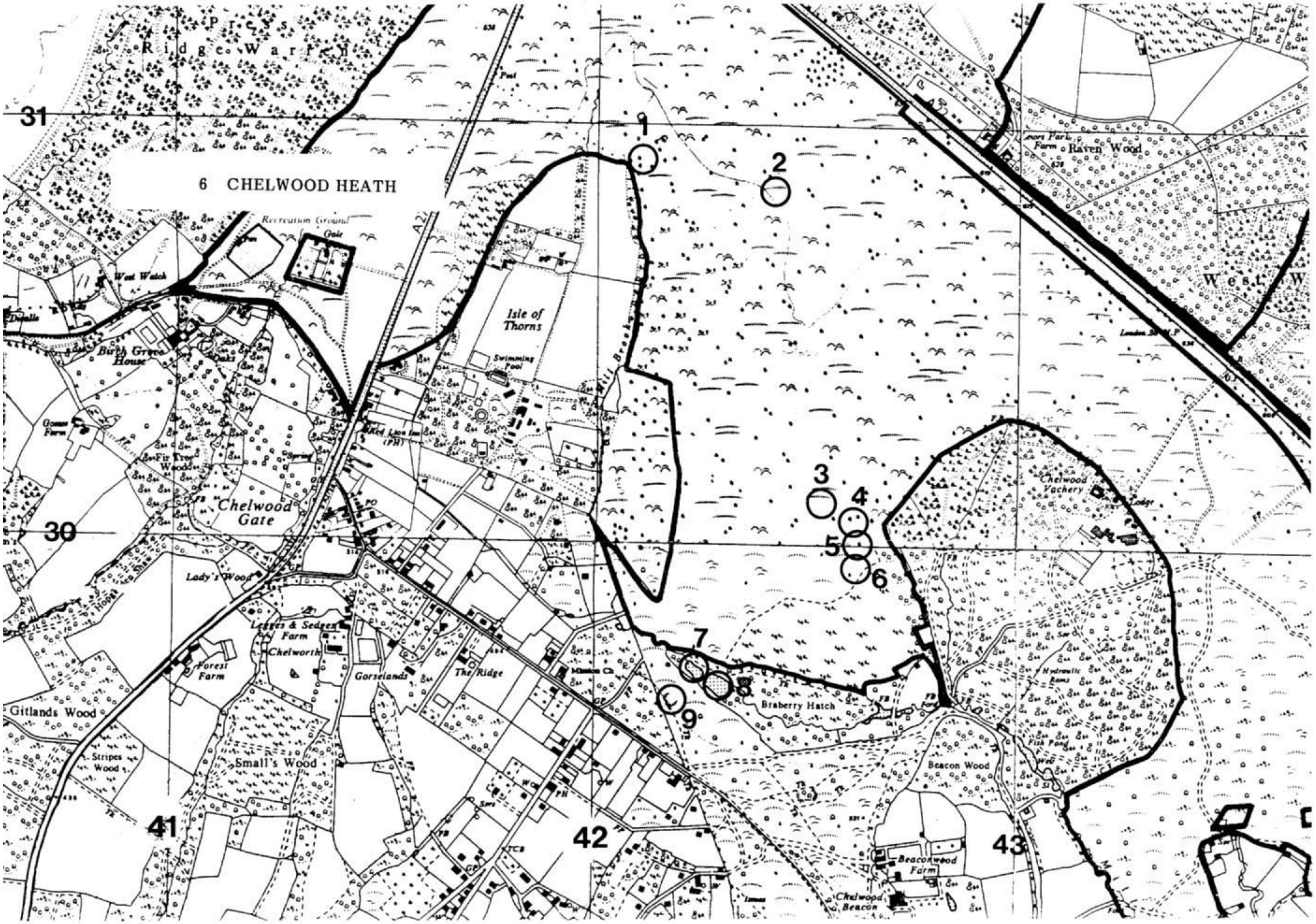

1 LAVENDER PLATT
Charlwood
Charlwood Farm
Alder Moors
Stoney Shaw
Hollow Shaw
Mudbrooks Farm
Old End
Kidbrooke Park
Prior's Field
Lodge
Tylehurst
Weir Pond
Kidbrooke Wood
Legsheath Farm
Plaw Wood
Lavender Platt
Greenhall Tol
Cherry Orchard
Coldharbour
Plawhatch Hall
Hindleap Warren
34
33
40
41
42
1
2


2 GOLF COURSE
Stonehouse
Ryst Wood
Highgate
Forest Row Recreation Ground
Pavilion
Royal Ashdown Forest Golf Club House
Golf Course
Tompset Bank
Greenhall
Ashdown Place
Spring
Shalesbrook
Acorn Gill
Bank Cottage
Forest View
Hollyoak
Yew Tree Hall
Whitehouse Farm
Ryst Wood Lodge
Ryst Wood House
Rystroll
The Plattings
Lines Farm
Parrock Wood
Little Parrock
Quabrook
A264
Water Farm
Shepherd's Gate
The Larches
Foxbury Wood
Toll Wood
Broadstone Farm
Toll Clump
Broadstone Warren
Chapel Cottage
Coleman's Hatch Recreation Ground
1
2
3
4
34
33
43
44
45

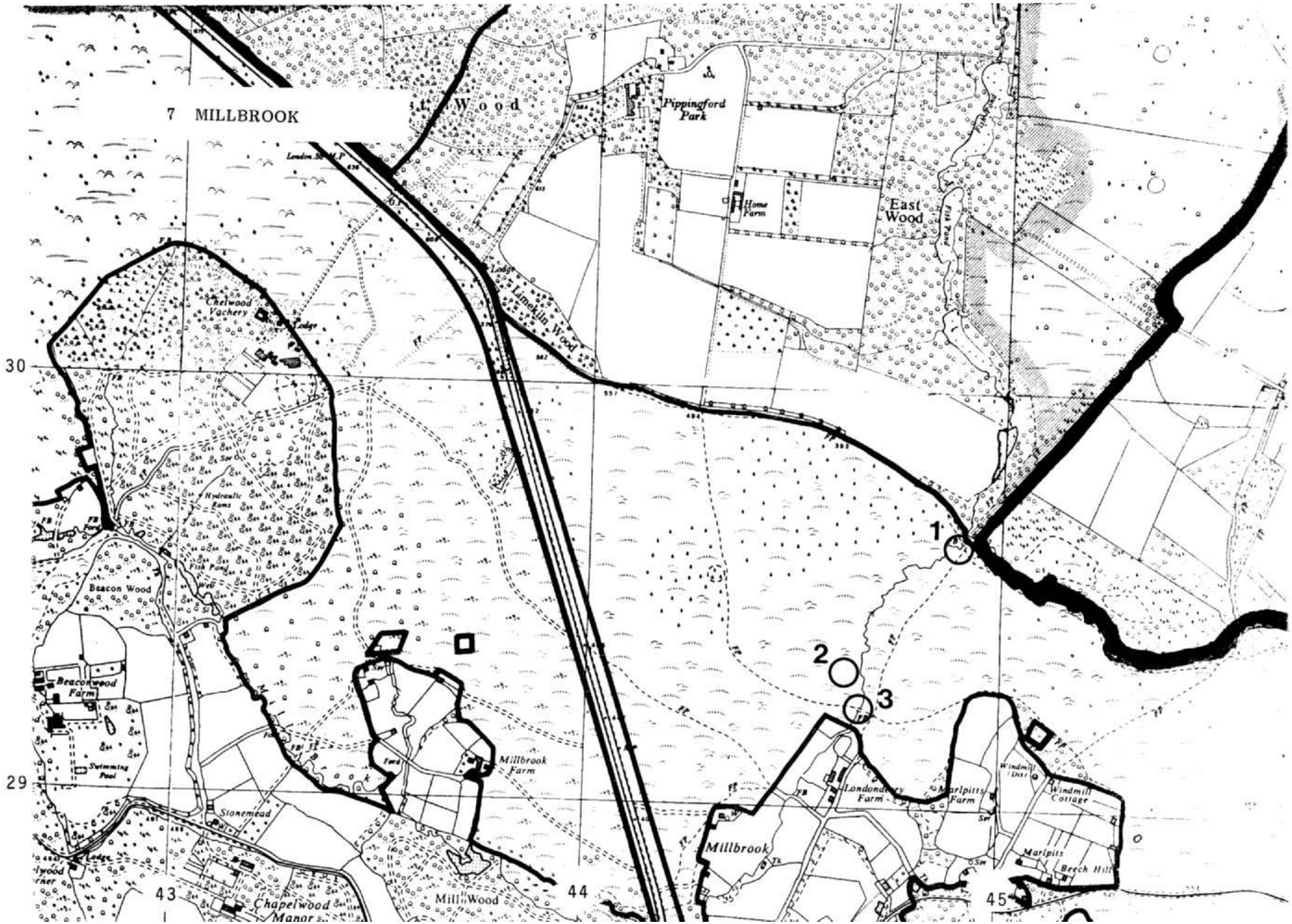

3 RIDGE ROAD
Broadstone Farm
1
2
3
4
5
Chapel Cottage
The Ridge
Recreation Ground
Stone Cottage
Hill Side
The Prelude
High Beeches
Church of Our Lady & St Richard (RC)
Convent of Notre Dame
Home Farm
Eighteen Acre Wood
Pond Wood
Church of St. Richard De Wych
Northbank Wood
Windyridge
Hook Kiln Farm
The Park
Half Moon Copse
ych Cross Clump
lump
Lower Park Sidings
Lower Park Farm
Raven Wood
Triangle Wood
Iron Mews
32
31
43
44
45

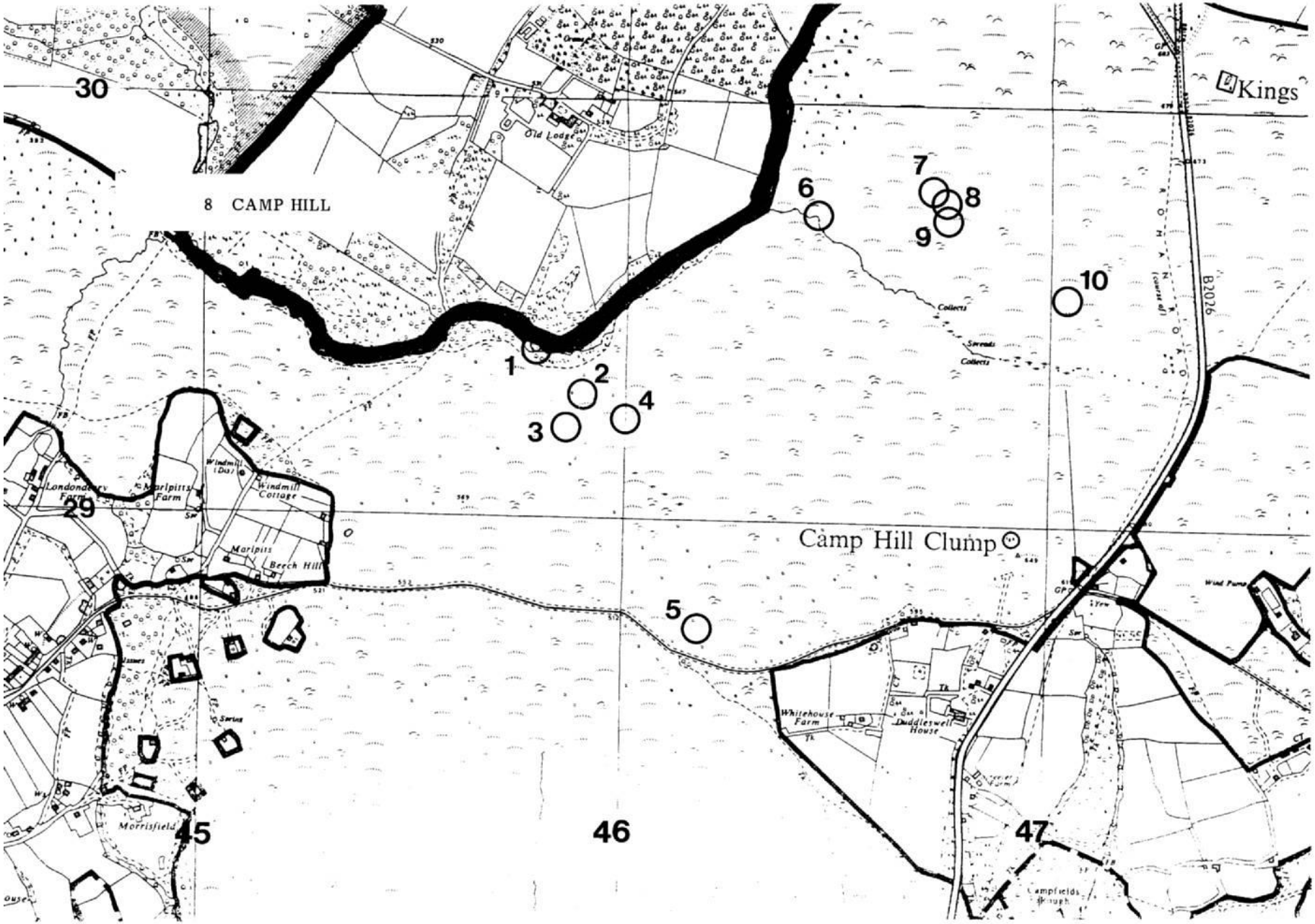

4 GILL'S LAP
Five Hundred Rough
Gills Lap Clump
Greenwood Gate Clump
Tumulus
Tile Lodge
New Lodge Farm
The Rough
The Bungalow
Nursery
Black Hill
B2026
ROMAN ROAD
1
2
3
32
31
46
47
48

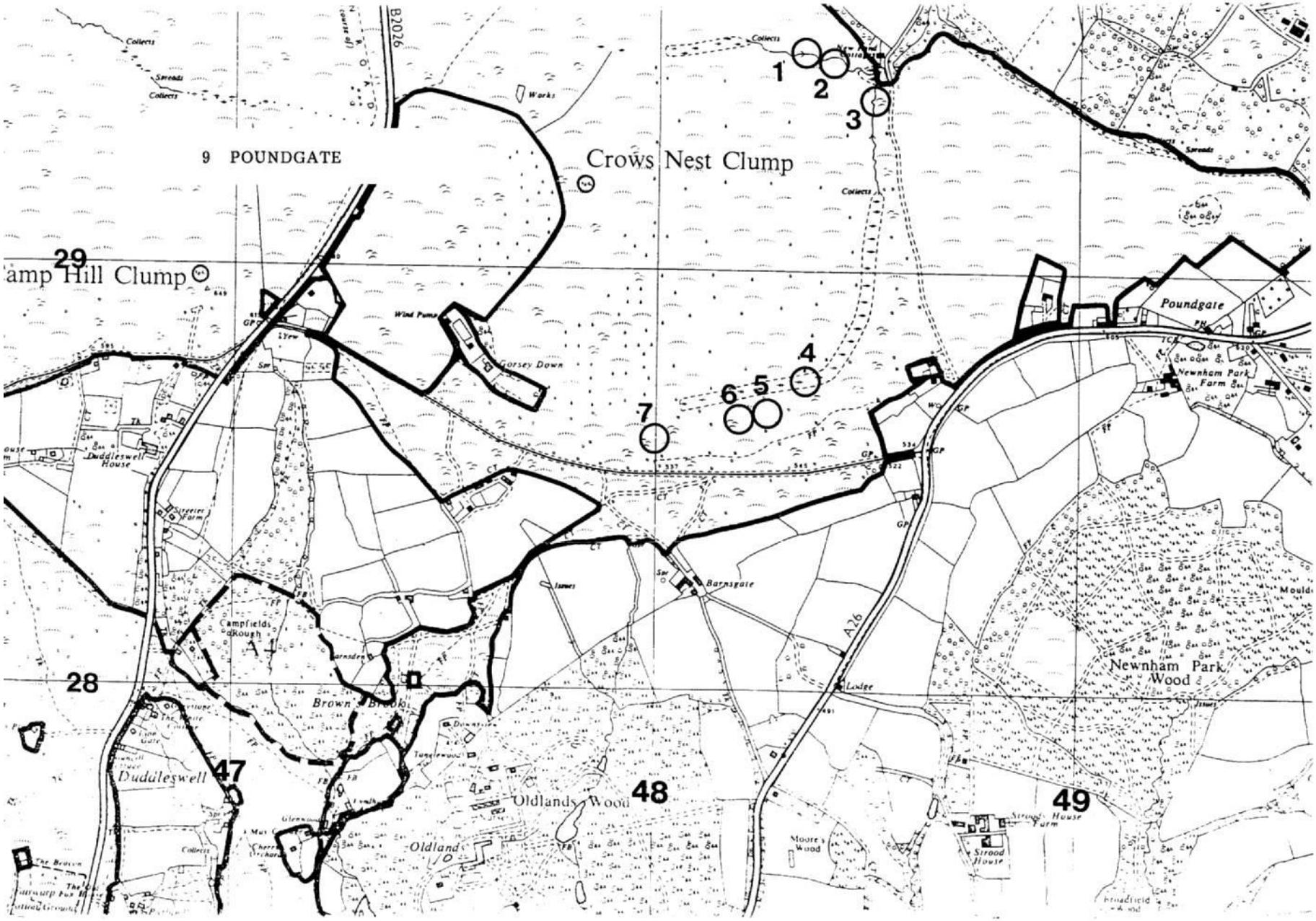

5 JINK'S HOLE
Home Wood
Add's Farm
Tyler's Wood
High Wood
Hoddley's Farm
Church Hill
Marden's Hill
Ward's Wood
Woodburn
Bunker Hill
Old Furnace
Wood Eaves
Innham's Wood
Almshouses
St John's Church
Crowborough Town
Quarries
Cow Field
Jack Daws
Sand Holes
Pump Plantation
Ockleys House
The Highlands
Home Farm
32
31
49
50
51

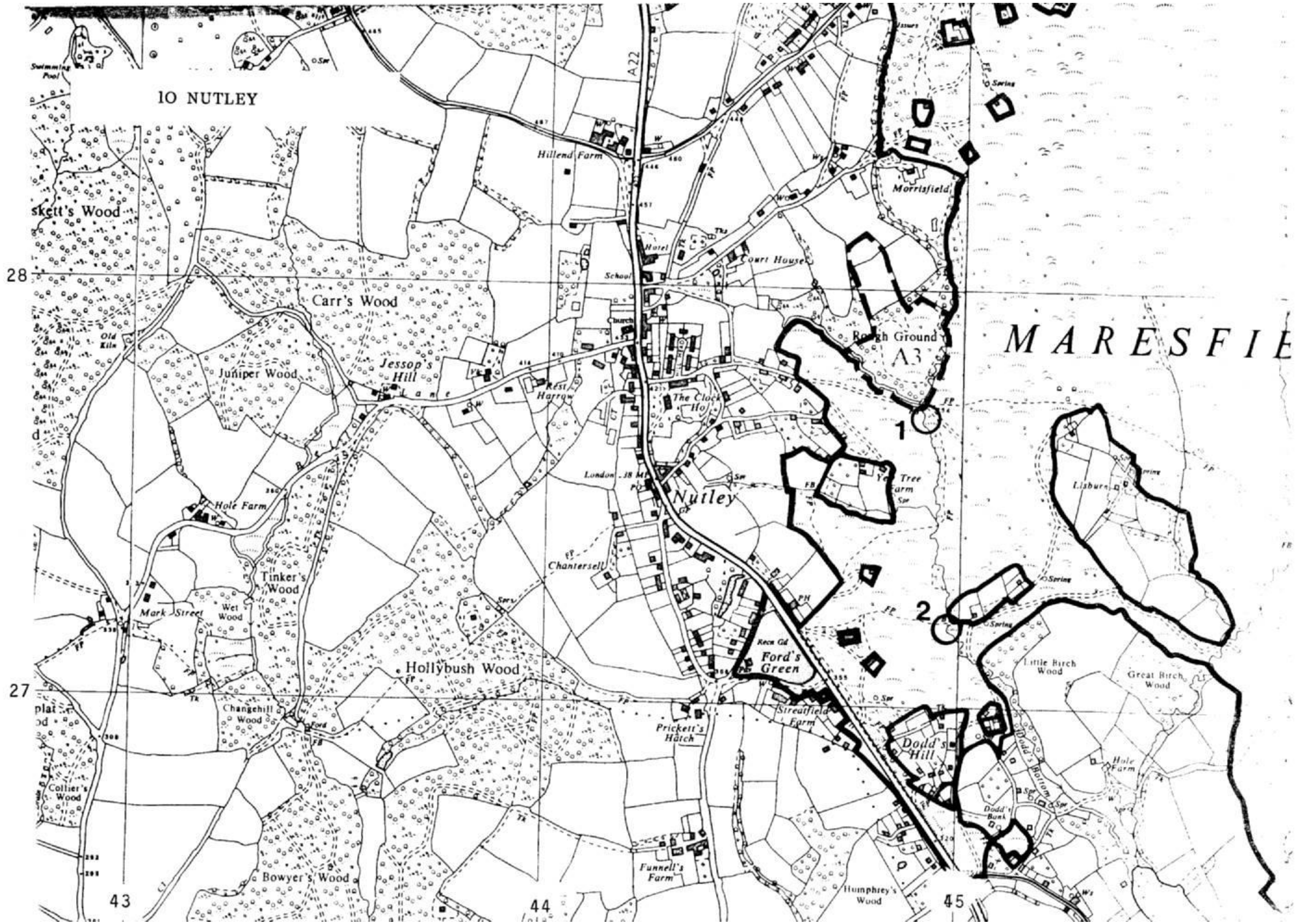


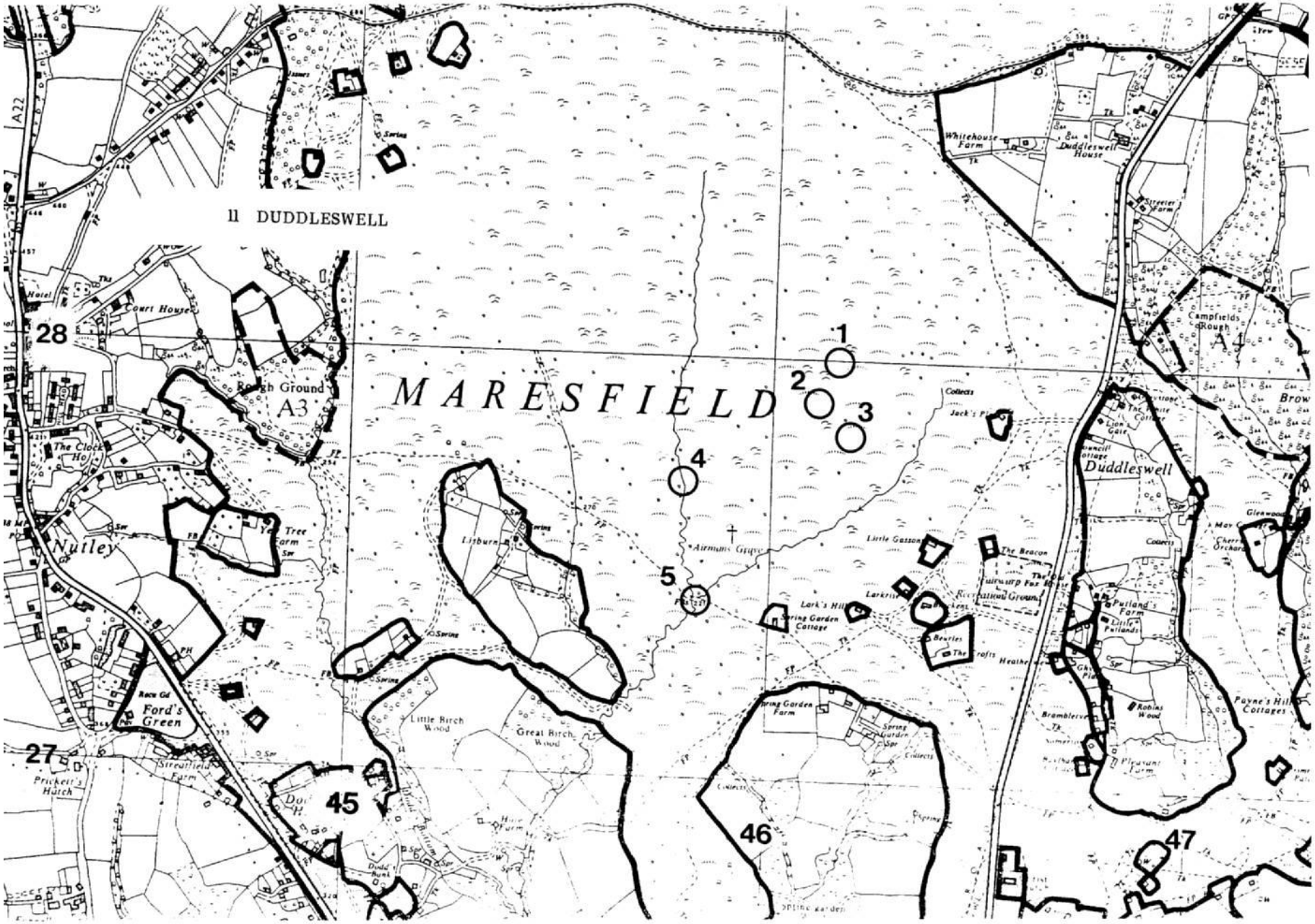
6 CHELWOOD HEATH
Ridge Warren
Recreation Ground
West Watch
Birch Grove House
Isle of Thorns
Swimming Pool
Red Lion Inn (PH)
Gosses Farm
Fir Tree Wood
Chelwood Gate
Lady's Wood
Legges & Sedges Farm
Chelworth
Forest Farm
Gitlands Wood
Stripes Wood
Small's Wood
Gorselands
The Ridge
Mission Ch
Braberry Hatch
Beacon Wood
Beaconwood Farm
Chelwood Beacon
Chelwood Vachery
Lodge
Hydraulic Rams
Fish Ponds
Raven Wood
West W
31
30
41
42
43
1
2
3
4
5
6
7
8
9


7 MILLBROOK
Wood
Pippingford Park
Home Farm
East Wood
Limekiln Wood
Chelwood Vachery
Lodge
Hydraulic Rams
Fish Ponds
Beacon Wood
Beaconwood Farm
Swimming Pool
Millbrook Farm
Ford
Stonemead
Lodge
Chapelwood Manor
Mill Wood
Millbrook
Londonderry Farm
Marlpitts Farm
Windmill (Dist)
Windmill Cottage
Marlpitts
Beech Hill
1
2
3
30
29
43
44
45


30
8 CAMP HILL
Old Lodge
Kings
6
7
8
9
10
B2026
1
2
3
4
Londonderry Farm
Marlpitts Farm
Windmill (Dis)
Windmill Cottage
29
Marlpitts
Beech Hill
Camp Hill Clump
5
Whitehouse Farm
Duddleswell House
Morrisfield
45
46
47


9 POUNDGATE
Crows Nest Clump
Camp Hill Clump
29
28
47
48
49
1
2
3
4
5
6
7
B2026
A26
Poundgate
Newnham Park Farm
Newnham Park Wood
Gorsey Down
Wind Pump
Barnsgate
Lodge
Campfields
Brown Bridge
Duddleswell
Duddleswell House
Oldlands Wood
Oldland
Moore's Wood
Strood House
Works
Collects
Spreads


IO NUTLEY
A22
Hillend Farm
Morrisfield
skett's Wood
Court House
School
Carr's Wood
Church
Rough Ground
A3
MARESFIE
Old Kiln
Juniper Wood
Jessop's Hill
Rest Harrow
The Clock Ho
Yew Tree Farm
Lisburn
Hole Farm
London 38 M
Nutley
Chantersell
Tinker's Wood
Mark Street
Wet Wood
Ford's Green
Little Birch Wood
Great Birch Wood
Hollybush Wood
Changehill Wood
Prickett's Hatch
Streatfield Farm
Dodd's Hill
Dodd's Bottom
Hole Farm
Dodd's Bank
Collier's Wood
Funnell's Farm
Bowyer's Wood
Humphrey's Wood
28
27
43
44
45
1
2


DUDDLESWELL
MARESFIELD
Whitehouse Farm
Duddleswell House
Campfields Rough
A4
Court House
Rough Ground
A3
The Clock Ho
Nutley
Tree Farm
Ford's Green
Streatfield Farm
Prickett's Hutch
Listburn
Airmans Grave
Little Gassons
The Beacon
Lark's Hill
Spring Garden Cottage
Duddleswell
Pudland's Farm
Little Pudlands
Robins Wood
Pleasant Farm
Payne's Hill Cottages
Little Birch Wood
Great Birch Wood
Spring Garden Farm
1
2
3
4
5
27
28
45
46
47

REFERENCES:

CHELMICK, D G (1979) - A Survey of the Odonata of Sussex (1965 - 1978). STNC Report

CHRISTIAN, G (1967) - Ashdown Forest. The Society of Friends of the Ashdown Forest.

GAUNT, R G (1984) - A remarkable emergence of Aeshna cyanea at a small pond in the Forest of Dean. Journal of the British Dragonfly Society 1 : 45 - 46.

MILNE, A A (1926) - Winnie-the-Pooh. Methuen & Co Ltd.

PENN, R (1984) - Portrait of Ashdown Forest. Robert Hale Ltd.

ACKNOWLEDGEMENTS

I am extremely grateful to Roger Tallack for introducing me to the Ashdown Forest and for providing much information on the dragonflies and localities to be found there. Thanks also to Dave Chelmick and Bob Merritt for dragonfly records and to David Harvey for supplying maps of the area.