LITTLEHAMPTON FORT REPORT ON BOTANICAL SURVEYS 2013

A: 03 MAY 2013

1. The Fort

Almost all the masonry has been covered by, and in part penetrated by, lvy (*Hedera helix*). On one small exposed section of brickwork the fern Wall-rue (*Asplenium ruta-muraria*) is established. As far as the diversity of plant species is concerned, stripping off and clearing the clothing of lvy would be beneficial: in time the re-mortared walls could support a variety of small species (for example other fern species and annuals) that would not compromise the integrity of the masonry. There are no species of interest within the curtilage of the fort other than a stand of Greater Pondsedge (*Carex riparia*) which is presumably associated with a spring or seepage, perhaps not unconnected with the well dug to provide water for the soldiers.

2. Dune advance South of Fort (TQ02670165)

Where the dunes have advanced up to the southern edge of the fort structure they have brought with them Marram (*Ammophila arenaria*), Sand Sedge (*Carex arenaria*) and other species which colonise such habitats. This extension to the dune area is welcome and it will be interesting to see whether any of the notable plant species of the main area will be found here. Disturbance of this part of the site by trampling etc should be kept to a minimum.

3. Sandy grassland and scrub

On the other sides of the fort there is sandy grassland. Much of this is relatively coarse with more Marram intruding together with Sea Couch (*Elytrygia atherica*) and Fescue (*Festuca*) species. There are here and close by the fort thickets of Common Gorse (*Ulex europaeus*) which were is spectacular flower on the visit and of particular importance for birds. Along the boundary with the road a few alien species have appeared such as the garden Bluebell (*Hyacinthoides x massartiana*): this should not be permitted to spread.

The sandy grassland is variable in composition. The best patch (around TQ0276701214) supports the Spring Vetch (*Vicia lathyroides*), an uncommon plant restricted to two or three sites in West Sussex. It is quite densely scattered over approximately 2m² and it would be desirable to ensure that the access track from the road deviates around this.

4. Update to Dune area (see para 2)

This second visit yielded more of the specialist plants of the dunes. Since this type of habitat is scarce in Sussex the specialities here are rare on a county basis, notably Sea Bindweed (*Calystegia soldanella*), Sand Timothy (*Phleum arenarium*), Dune Fescue (*Vulpia fasciculata*). The current path from the gate towards the southern edge of the dunes has minimal disturbance upon this area. During the restoration of the Fort and after the opening to the public this area of Dune advance should be protected since its structure is highly vulnerable to trampling.

5. Update to Sandy Grassland and scrub (see para 3) This area supports an interesting collection of grass species, from Marram (Ammophila arenaria) and Sand Couch (Elytrigia juncea) (plus Sand Sedge, Carex arenaria) in the looser sand to sward species such as Creeping Bent (Agrostis stolonifera), Festuca rubra (Red Fescue) in more stable areas; some parts are dominated by False Oat-grass (Arrhenatherum elatius). Two notable calcicoles (species associated in Sussex with chalk downland) are present: Upright Brome (*Bromopsis* erecta) and Downy Oat-grass (Helictotrichon pubescens) - the latter refound on this visit after some 30 years or more. One small patch (TQ0276001247) yielded Silver Hair-grass (Aira caryophyllea), a species that has declined seriously in the county in recent years; the spot is very close to the colony of Spring Vetch (Vicia lathyroides) and any access road or track should be routed away from these two species. A few days before the second visit more than 20m² adjoining the eastern perimeter fence had been devastated by an accidental fire. The majority of this was Gorse (Ulex europaeus) and it would be as well to ensure that any car-parking facility created on the site in the future is not too close to such flammable scrub. A limited area of grassland was also burned but generally the most interesting examples of this habitat do not adjoin the boundary fence on this side.

C: Conclusions

In the process of restoring the Fort there are two prime areas of botanical importance to consider: (a) the Dune advance to the South (with SSSI status) and (b) the mixed grassland between the Fort and road. Disturbance to the Dune area (a) may be minimised by adhering to the beaten path from the gate on the board-walk. The grassland (b) is complex and many parts will be resilient, but care should be exercised in avoiding the site of the Spring Vetch and Silver Hair-grass (TQ02760124), perhaps some 10m² in extent. Some form of light, permeable trackway elsewhere should not seriously damage this habitat. As a general rule the less valuable grassland and scrub lies closest to the eastern boundary with the road and thus temporary parking and temporary storage in a 5m band parallel should not damage the botanical interest of the site.

The Fort itself should be improved from a botanical point of view by the removal of the mantle of Ivy (*Hedera helix*) and scrub. In time the restored brickwork could support a pleasing variety of small plant species which would not threaten its integrity. The grassy slopes, sensitively mown, would (in time) also be colonised by a variety of wild plant species to add to the bio-diversity of an already rich site.

D: Plant List (appended)

The list does not pretend to be exhaustive, particularly in regard to the species of the Dune advance. It should also be borne in mind that the first visit was made at the end of a long, cold Spring, while the second took place after several weeks of a hot and dry mid-Summer. In particular it is probable that various species of Clover (*Trifolium*) have been missed. Plants of significance, either because of their scarcity in the county or because they appear outside their usual territory, have been marked with 'S' in Column C. TQ00F denotes the tetrad (in this case 2x2 km sq) in which the site falls and is for the purpose of natural history records collated and stored at the Sussex Biological Records Centre, Woods Mill.

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