**Table S7.** *Thermophile species in channel C and at other Ipswichian sites according to pollen biozonation*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Flora/fauna | Thermophile species | Bradley Fen | Bobbitshole | Swanton Morley | Deeping St James | Woolpack Farm | Tattershall Castle | Trafalgar Square |
| I | II | I | II | I | II | III | II | II | II | II |
| Pollen | *Hedera* | Y |  |  | Y |  | Y | Y | Y |  |  |  |
| *Nuphar*  | Y | Y | Y | Y | Y |  | Y | Y | Y | Y |  |
| *Ilex* | Y |  |  | Y |  |  | Y | Y |  | Y |  |
| *Carpinus* |  |  |  |  |  |  | Y |  |  |  |  |
| Plant macrofossils | *Naias minor* | Y |  |  | Y |  | Y |  | Y |  |  | Y |
| *Trapa natans* L. |  |  |  |  |  | Y |  |  |  |  | Y |
| *Salvinia natans* |  |  | Y |  |  | Y |  | Y |  |  |  |
| *Acer* cf. *monspessulanum* |  |  |  | Y |  | Y | Y |  | Y | Y | Y |
| *Sambucus nigra* |  |  |  |  |  | Y | Y |  | Y |  |  |
| *Mentha aquatica* |  |  | Y |  |  |  |  |  |  |  |  |
| *Myosoton aquaticum* |  |  | Y |  |  |  |  |  |  |  |  |
| *Najas marina* |  |  | Y | Y |  |  |  |  |  |  |  |
| *Oenanthe aquatica* |  |  | Y |  |  |  |  |  |  |  |  |
| *Potamogeton* cf. *densus* |  |  | Y |  |  |  |  |  |  |  |  |
| *Cladium mariscus* |  |  |  | Y |  | Y |  |  |  |  |  |
| *Hydrocharis morsus-ranae* |  |  | ? | Y |  | Y |  |  |  |  |  |
| *Lemna* cf. *minor* |  |  |  | Y |  |  |  |  |  |  |  |
| Mollusca | *Belgrandia marginata* | Y |  |  | Y |  | Y |  | Y | Y | Y | Y |
| *Cochlicopa niten*s |  |  |  |  |  |  |  | Y | Y | Y |  |
| *Vallonia enniensis* |  |  |  | Y |  | Y |  | Y | Y | Y |  |
| *Potomida littoralis* |  |  |  |  |  |  |  |  | Y |  | Y |
| *Clausilia* cf. *pumila* |  |  |  |  |  |  |  | Y | Y |  | Y |
| *Truncatellina cylindrica* |  | Y |  |  |  |  |  |  | Y | Y | Y |
| *Discus ruderatus* |  |  |  |  |  |  |  | Y |  | Y |  |
| *Anisus (Planorbis) vorticulis* | Y | Y | Y | Y |  | Y |  | Y | Y | Y | Y |
| *Helicella itala itala* |  | Y |  |  |  |  |  |  |  | Y | Y |
| *Pisidium* *moitessierianum* | Y | Y |  | Y |  |  |  | Y | Y | Y | Y |
| *Pisidium* *supinum* | Y | Y |  | Y |  |  |  |  | Y |  | Y |
| Coleoptera | *Onthophagus massai* | Y |  |  |  |  |  |  | Y | Y |  | Y |
| *Caccobius schreberi* | Y |  |  | Y |  |  |  | Y | Y |  | Y |
| *Onthophagus furcatus* |  |  |  |  |  |  |  | Y | Y |  | Y |
| *Oniticellus fulvus* |  |  |  |  |  |  |  |  | Y |  | Y |
| *Onthophagus vacca* |  |  |  |  |  |  |  |  | Y | Y | Y |
| *Rhyssemus germanus* |  |  |  |  |  |  |  |  | Y |  | Y |
| *Drepanocerus* |  |  |  |  |  |  |  |  | Y |  | Y |
| *Heptaulacus cf. pirazzolii* |  |  |  |  |  |  |  | Y | Y |  |  |
| *Bembidion elongatum* | Y |  |  |  |  |  |  | Y |  | Y | Y |
| *Oodes gracilis* |  |  |  | Y |  |  |   | Y |  | Y | Y |
| *Cybister lateralimarginatus* |  |  |  | Y |  |  |  | Y |  |  | Y |
| *Rhysodes sulcatus* |  |  |  |  |  |  |  | Y |  |  | Y |
| *Valgus hemipterus* |  |  |  | Y |  |  |  | Y |  |  |  |
| *Melanotus niger* |  |  |  |  |  |  |  |  |  |   |   |
| *Aphodius carpetanus* |  |  |  |  |  |  |  |  | Y |  |  |
| *Bembidion octomaculatum* | Y |  |  |  |  |  |  | Y |  |  | Y |
| *Hydrophilus caraboides* |  |  |  |  |  |  |  | Y |  |  | Y |
| *Hydrous piceus* |  |  |  |  |  |  |  | Y |  |  | Y |
| *Pelochares versicolor* | Y |  |  |  |  |  |  |  |  |  |  |
| *Cercyon sternalis* |   |   |   |   |   |   |   | Y | Y |   |   |
| *Zabrus tenebrioides* | Y |  |  |  |  |  |  |  | Y |  |  |
| *Copris lunaris* | Y |  |  |  |  |  |  |  | Y | Y | Y |
| *Pleurophorus caesus* | Y |  |  |  |  |  |  | Y |  |  | Y |
| Vertebrates | *Palaeoloxodon antiquus* |  |  |  |  |  | Y |  | Y | Y |  | Y |
| *Hippopotamus amphibius* |  |  |  |  |  | Y | Y |  |  |  | Y |
| *Dama dama* |  |  |  |  |  | Y |  | Y | Y |  | Y |
| *Emys orbicularis* | Y |  |  |  |  | Y |  |  |  |  |  |
| *Crocuta crocuta* |  |  |  |  |  | Y |  |  |  |  | Y |
| *Bos primigenius* |  |  |  |  |  | Y | Y |  | Y |  | Y |
| *Panthero leo* |  |  |  |  |  |  |  |  |  |  | Y |
| *Stephanorhinus hemitoechus* |  |  |  |  |  |  |  |  |  |  | Y |
| *Ursus arctos* |  |  |  |  |  |  |  |  | Y |  | Y |