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Table 1. Ranges and categories of water-table (cm) and fertility in British fens. Data are derived from Shaw & Wheeler (1991). Fertility was estimated phytometrically using Epilobium hirsutum and Phalaris arundinacea seedlings as test species and values refer to mean shoot dry weight (mg).

| | v. low | low | moderate | high | very high |
|---|---|---|---|---|---|
| Water depth (cm) | < -25 | -25 -10 | -9 - +1 | +1 - +9 | > +10 |
| Fertility (mg) | < 3 | 3 - 9 | 10 - 20 | 21 - 35 | > 35 |

Table 2 Values of water table of valley fens in Eastern England compared with values in valley fens examined elsewhere in Britain and with all fen hydrotopographical types examined elsewhere in Britain. Data are derived from Wheeler & Shaw (1987) and Shaw & Wheeler (1990)

| | Mean | SE | Min | Max |
|---|---|---|---|---|
| Eastern England valley fens | -7.4 | 0.26 | -59 | 31 |
| All valley fens except, Eastern England | -1.9 | 0.1 | -100 | 29 |
| All fens, except Eastern England | -1.5 | 0.1 | -100 | 29 |

Table 3. Mean values (±SE) of water table and fertility associated with stands of rich-fen vegetation in Eastern England sites and other lowland British sites

| | Water table | | Fertility | |
|---|---|---|---|---|
| Cty | East Eng | Elsewhere | East Eng | Elsewhere |
| M9 | -1.1 ± 0.9 | 1.7 ± 1.2 | 10.3 ± 0.4 | 9.3 ± 1.3 |
| M13 | -11.0 ± 1.0 | -4.6 ± 1.6 | 8.2 ± 1.1 | 6.1 ± 0.4 |
| M22 | -8.2 ± 1.7 | -5.3 ± 1.5 | 16.1 ± 1.3 | 10.8 ± 1.0 |
| M24 | -21.6 ± 7.2 | -17.6 ± 4.3 | 14.1 ± 2.7 | 7.2 ± 1.5 |

Cty: M9: Carex rostrata - Calliergon cuspidatum mire
M13: Schoenus nigricans - Juncus subnodulosus mire
M22: J. subnodulosus - Cirsium palustre fen meadow
M24: Molinia caerulea - Cirsium dissectum fen meadow

Table 4 Summer water levels associated with plant species recorded from valley fen systems in lowland Britain.

Ebg: Ellenberg 'moisture value'
Ind: ~ species associated with fluctuating water conditions (Ellenberg)
▫ species found in sites that are periodically inundated (Ellenberg)

Water table values are expressed as cm relative to the soil surface

%> -5; %>-10: % occurrences found in sites with summer water table less than 5 and 10 cm below the surface

| NVC | Name | Ebg | Ind | Wtab mn | SE | Max | Min | %> -5 | %> -10 | N |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | Achi ptar | 8 | ~ | -2.57 | 1.35 | 3.6 | -13 | 66.7 | 91.7 | 15 |
| 20 | Agro cani | 9 | | -1.7 | 1.16 | 10 | -24.6 | 81.3 | 84.4 | 39 |
| 22 | Agro stol | 6 | ~ | -2.81 | 0.78 | 15.2 | -38 | 70.8 | 85.8 | 129 |
| 53 | Alnu glut | 9 | = | -1.16 | 2.05 | 13.4 | -18.4 | 66.7 | 86.7 | 16 |
| 63 | Anag tene | | | -2.47 | 0.68 | 13.4 | -36.5 | 76 | 91.7 | 109 |
| 67 | Ange sylv | 8 | | -8.31 | 1.27 | 15.2 | -100 | 52.5 | 71.3 | 136 |
| 71 | Anth odor | X | | -5.85 | 1.38 | 10.8 | -48.4 | 66.7 | 76.5 | 57 |
| 97 | Arrh elat | 5 | | -14.75 | 2.86 | -3.2 | -28 | 12.5 | 50 | 12 |
| 136 | Betu pube | X | | -5.9 | 2.94 | 3.8 | -31.6 | 57.1 | 78.6 | 14 |
| 151 | Briz medi | X | | -6.95 | 1.16 | 7.6 | -48.4 | 57.4 | 76.5 | 78 |
| 169 | Cala cane | 9 | ~ | -18.9 | 13.39 | -3.2 | -59 | 25 | 75 | 4 |
| 178 | Call vulg | X | | -0.46 | 0.61 | 10 | -16.8 | 84.8 | 93.9 | 72 |
| 179 | Calt palu | 8 | = | -4.47 | 1.22 | 15.2 | -50 | 68 | 77.3 | 80 |
| 192 | Card flex | 8 | | -9.97 | 4.01 | -2.2 | -20 | 50 | 50 | 4 |
| 195 | Card prat | 7 | | -0.95 | 1.01 | 15.2 | -22.75 | 74.6 | 87.3 | 67 |
| 202 | Care acut | 9 | ~ | -6 | 1.85 | 7 | -25 | 52.4 | 76.2 | 21 |
| 211 | Care curt | 9 | | -1.16 | 2.36 | 10.8 | -59 | 80.8 | 96.2 | 29 |
| 212 | Care demi | 8 | | -0.36 | 0.46 | 8 | -15 | 90.3 | 94.4 | 81 |
| 213 | Care dian | 9 | = | 4.34 | 1.94 | 15.2 | -12.2 | 84.6 | 92.3 | 15 |
| 215 | Care dioi | 9 | | -0.86 | 0.61 | 10.8 | -14.75 | 83.3 | 92.6 | 58 |
| 217 | Care dist | 9 | = | -11.39 | 3.41 | 8 | -38.6 | 35.7 | 57.1 | 15 |
| 219 | Care echi | 8 | ~ | -1.29 | 0.56 | 10.8 | -31.6 | 82 | 87.8 | 154 |
| 220 | Care elat | 10 | ~ | -9.57 | 3.96 | 8 | -30 | 37.5 | 62.5 | 8 |
| 223 | Care flac | 6 | ~ | -6.66 | 1.12 | 6 | -48.4 | 61.6 | 78.1 | 85 |
| 225 | Care host | 9 | | -5.91 | 1.05 | 1 | -48.4 | 66.2 | 80.5 | 84 |
| 228 | Care lasi | 9 | = | 1.54 | 1.47 | 8.8 | -22 | 94.4 | 94.4 | 19 |
| 229 | Care lepi | 8 | | -2.27 | 0.72 | 14.6 | -34.5 | 75 | 90 | 83 |
| 230 | Care limo | 9 | = | 3.86 | 0.79 | 10 | -2.5 | 100 | 100 | 20 |
| 233 | Care nigr | 8 | ~ | -2.23 | 0.98 | 15.2 | -59 | 79.1 | 85.5 | 116 |
| 239 | Care pani | 7 | ~ | -3.89 | 0.59 | 14.6 | -59 | 70.7 | 82.5 | 273 |
| 240 | Care pani | 9 | = | -3.63 | 1.43 | 7 | -22 | 63.6 | 90.9 | 24 |
| 247 | Care puli | 9 | | -5.51 | 1.23 | 8 | -48.4 | 68.8 | 79.7 | 72 |
| 252 | Care rost | 10 | | 0.04 | 0.87 | 16 | -59 | 85.2 | 90.4 | 124 |
| 271 | Cent nigr | 5 | | -10.7 | 2.13 | 6 | -38.6 | 48.1 | 66.7 | 33 |
| 284 | Cera font | 5 | | -9.16 | 3.17 | 1.2 | -48.4 | 56.3 | 68.8 | 17 |
| 315 | Cirs arve | X | | -32.2 | 14.88 | -1 | -100 | 20 | 40 | 7 |
| 318 | Cirs palu | 8 | ~ | -7.52 | 1 | 8 | -100 | 57 | 73.2 | 170 |
| 320 | Clad mari | 9 | | -14.6 | 3.49 | 11 | -50 | 34.6 | 57.7 | 28 |

| NVC | Name | Ebg | Ind | Wtab mn | SE | Max | Min | %> -5 | %> -10 | N |
|---|---|---|---|---|---|---|---|---|---|---|
| 366 | Dact fuch | X | | -8.94 | 1.34 | 1.8 | -50 | 42.1 | 66.7 | 64 |
| 367 | Dact inca | 8 | - | -3.03 | 1.3 | 8.4 | -34.5 | 67.4 | 83.7 | 45 |
| 368 | Dact macu | X | | -2.63 | 1.53 | 7.8 | -34.5 | 70 | 83.3 | 33 |
| 370 | Dact maja | 8 | - | -1.88 | 0.64 | 1.4 | -5.6 | 86.7 | 100 | 16 |
| 371 | Dact trau | 9 | = | -1.03 | 1.86 | 8.4 | -5.8 | 71.4 | 100 | 7 |
| 377 | Desc cesp | 7 | - | -9 | 3.21 | 4.2 | -26 | 60 | 60 | 12 |
| 392 | Dros angl | 9 | = | 1.93 | 0.9 | 9 | -5.4 | 94.1 | 100 | 21 |
| 393 | Dros inte | 9 | = | 0.83 | 0.86 | 8.8 | -15 | 90 | 96.7 | 32 |
| 394 | Dros rotu | 9 | | -0.29 | 0.45 | 15 | -24.6 | 85.5 | 91.9 | 184 |
| 408 | Eleo mult | | | 0.84 | 0.56 | 13.4 | -15 | 86.8 | 96.1 | 82 |
| 410 | Eleo quin | 9 | | -1.51 | 0.37 | 2.2 | -13.8 | 87.1 | 96.8 | 67 |
| 421 | Epil hirs | 8 | = | -13.14 | 4.86 | 7 | -100 | 42.9 | 57.1 | 22 |
| 425 | Epil palu | 9 | | -1.91 | 1.02 | 15.2 | -50 | 76 | 86.7 | 86 |
| 426 | Epil parv | 9 | = | -6.2 | 3.32 | 6 | -21.8 | 50 | 75 | 8 |
| 431 | Epip palu | 8 | - | -8.1 | 1.26 | 7.6 | -38.6 | 43.9 | 70.2 | 63 |
| 432 | Equi arve | 6 | - | -5.51 | 1.12 | 6 | -18.8 | 50 | 85 | 24 |
| 433 | Equi fluv | 10 | | -2.27 | 1.25 | 16 | -50 | 75.3 | 83.1 | 88 |
| 435 | Equi palu | X | | -3.67 | 0.73 | 13.4 | -34.5 | 71 | 86 | 114 |
| 442 | Eric tetr | 8 | | -0.59 | 0.53 | 24.6 | -34.5 | 84.4 | 90.4 | 183 |
| 446 | Erio angu | 9 | = | -0.24 | 0.41 | 16 | -59 | 86.3 | 92.8 | 285 |
| 447 | Erio lati | 9 | | -3.52 | 0.71 | 6 | -18.8 | 68.9 | 88.9 | 49 |
| 458 | Eupa cann | 7 | | -8.98 | 1.6 | 11 | -100 | 53.5 | 72.1 | 97 |
| 474 | Fest ovin | 3 | | -6.16 | 1.66 | 0 | -19 | 45.5 | 72.7 | 14 |
| 476 | Fest rubr | X | | -8.77 | 1.49 | 5.2 | -38.6 | 47.7 | 68.2 | 48 |
| 483 | Fili ulma | 8 | | -8.54 | 1.68 | 11 | -100 | 50.7 | 70.7 | 82 |
| 505 | Gali apar | X | | -19.86 | 12.07 | 11 | -100 | 37.5 | 50 | 8 |
| 509 | Gali palu | 9 | = | -2.18 | 1.27 | 15.2 | -50 | 76.2 | 82.5 | 77 |
| 512 | Gali uliq | 8 | - | -8.71 | 1.25 | 6 | -48.4 | 49.3 | 71.2 | 81 |
| 549 | Gymn cono | 7 | - | -8.26 | 1.49 | 8.4 | -38.6 | 47.7 | 70.5 | 49 |
| 551 | Hamm palu | | | 0.12 | 2.89 | 7.4 | -10.4 | 80 | 80 | 5 |
| 580 | Holc lana | 6 | | -5.71 | 0.95 | 10.8 | -48.4 | 61.6 | 75.8 | 116 |
| 590 | Hydr vulg | 9 | - | -4.17 | 0.87 | 16 | -50 | 68.2 | 81.3 | 122 |
| 596 | Hype elod | 9 | = | 2.31 | 0.77 | 16 | -8.2 | 97.1 | 100 | 37 |
| 603 | Hype tetr | 8 | = | -7.61 | 1.88 | 5 | -25 | 50 | 66.7 | 20 |
| 615 | Iris pseu | 10 | | -1.38 | 5.54 | 15.2 | -38 | 87.5 | 87.5 | 8 |
| 619 | Junc acut | 8 | | -1.78 | 0.64 | 16 | -50 | 81.5 | 87.9 | 195 |
| 622 | Junc arti | 8 | - | -2.5 | 0.69 | 14.6 | -32.4 | 77.6 | 88.2 | 96 |
| 626 | Junc bulb | | | 0.03 | 0.62 | 13.4 | -22.6 | 87.5 | 92.5 | 86 |
| 629 | Junc conq | 7 | - | -3.01 | 3.48 | 15.2 | -48.4 | 64.3 | 85.7 | 18 |
| 630 | Junc effu | 7 | - | -3.13 | 1.64 | 15.2 | -59 | 76.9 | 86.5 | 60 |
| 633 | Junc infl | 7 | - | -8.45 | 1.68 | -2 | -21.8 | 45.5 | 63.6 | 13 |
| 658 | Lath prat | 8 | | -7.67 | 1.4 | 0.4 | -26 | 42.9 | 81 | 23 |
| 665 | Lemn mino | 11 | | 0.45 | 4.41 | 11 | -9.4 | 75 | 100 | 4 |
| 668 | Leon autu | 5 | | -3.85 | 5.54 | 10.8 | -18.8 | 50 | 75 | 5 |
| 669 | Leon hisp | 4 | | -9.42 | 5.36 | 1 | -38.6 | 57.1 | 57.1 | 7 |
| 670 | Leon tara | | | -8.37 | 3.2 | 0 | -36.5 | 45.5 | 81.8 | 11 |
| 686 | Linu cath | X | | -3.56 | 1.08 | 2 | -18.8 | 66.7 | 90.5 | 21 |
| 688 | List ovat | 6 | - | -17.25 | 3.85 | -3.6 | -38.6 | 12.5 | 25 | 10 |
| 702 | Lotu uliq | 8 | - | -7.9 | 1.37 | 15.2 | -59 | 54.4 | 69.1 | 82 |
| 709 | Luzu mult | 6 | - | -8.53 | 1.91 | 10.8 | -48.4 | 52.6 | 63.2 | 42 |
| 713 | Lych flos | 6 | - | -5.62 | 1.46 | 15.2 | -48.4 | 55.1 | 71.4 | 56 |
| 731 | Lyth sali | 8 | = | -10.06 | 3.83 | 4 | -48.4 | 45.5 | 72.7 | 15 |

| NVC | Name | Ebg | Ind | Wtab mn | SE | Max | Min | %> -5 | %> -10 | N |
|---|---|---|---|---|---|---|---|---|---|---|
| 755 | Ment aqua | 9 | = | -4.84 | 0.9 | 15.2 | -50 | 67.3 | 81.3 | 121 |
| 762 | Meny trif | 9 | = | -0.17 | 0.7 | 16 | -59 | 84.3 | 90.2 | 164 |
| 776 | Moli caer | 7 | ~ | -2.49 | 0.47 | 24.6 | -48.4 | 76.1 | 86.7 | 365 |
| 786 | Myos laxa | 8 | ~ | -3.57 | 2.89 | 9.2 | -50 | 80 | 80 | 20 |
| 793 | Myri gale | 9 | | -0.96 | 1.05 | 24.6 | -48.4 | 78.8 | 88.8 | 89 |
| 801 | Nart ossi | 9 | | 0.26 | 0.46 | 15 | -24.6 | 86.9 | 92.8 | 163 |
| 811 | Oena lach | | | -7.39 | 2.59 | 8.4 | -30 | 56.3 | 62.5 | 17 |
| 844 | Parn palu | 8 | ~ | -4.32 | 0.99 | 8.4 | -38.6 | 66.7 | 85.2 | 56 |
| 846 | Pedi palu | 9 | = | -0.76 | 0.53 | 13.4 | -18.4 | 84.5 | 91.3 | 110 |
| 847 | Pedi sylv | 8 | ~ | -1.34 | 1.05 | 2.2 | -9.2 | 76.9 | 100 | 13 |
| 855 | Phal arun | 8 | = | 1.55 | 1.97 | 5.4 | -3 | 100 | 100 | 4 |
| 861 | Phra aust | 10 | ~ | -6.48 | 1.6 | 24.6 | -100 | 63.7 | 77.5 | 106 |
| 870 | Ping vulg | 8 | | -2.83 | 0.67 | 8.4 | -34.5 | 78.4 | 89.8 | 95 |
| 873 | Plan lanc | X | | -20.29 | 4.29 | 0 | -48.4 | 11.1 | 11.1 | 12 |
| 877 | Plat bifo | 5 | ~ | 2.52 | 2.05 | 8.4 | -1 | 100 | 100 | 4 |
| 890 | Poa triv | 7 | | -7.85 | 3.3 | 3.6 | -19.4 | 50 | 62.5 | 8 |
| 894 | Poly serp | 6 | | -1.55 | 1.05 | 5.6 | -10.4 | 73.7 | 94.7 | 21 |
| 895 | Poly vulg | 5 | | -7.36 | 2.48 | 1.4 | -19 | 40 | 70 | 11 |
| 925 | Pota colo | 12 | | 3.75 | 1.31 | 6 | 1 | 100 | 100 | 4 |
| 937 | Pota poly | 12 | | 1.81 | 0.39 | 14 | -13.8 | 95.2 | 98.1 | 115 |
| 946 | Pote erec | X | | -5.38 | 0.77 | 15 | -50 | 64.8 | 77.8 | 197 |
| 949 | Pote palu | 10 | | -1.44 | 1.5 | 16 | -59 | 79.4 | 91.2 | 75 |
| 959 | Prun vulg | X | | -8.12 | 2.06 | 1.8 | -48.4 | 64.5 | 77.4 | 37 |
| 969 | Puli dyse | 7 | ~ | -11.25 | 3.41 | -0.4 | -25 | 20 | 40 | 7 |
| 981 | Ranu acri | X | | -9.57 | 1.75 | 1.2 | -48.4 | 48.7 | 64.1 | 45 |
| 989 | Ranu flam | 9 | ~ | 0.68 | 0.56 | 16 | -22 | 89.9 | 92.9 | 114 |
| 995 | Ranu repe | 7 | ~ | -5.9 | 4.09 | 4.8 | -19.4 | 75 | 75 | 6 |
| 1006 | Rhin mino | X | | -11.21 | 3.18 | 2.2 | -36.5 | 36.4 | 54.5 | 13 |
| 1009 | Rhyn alba | 9 | = | 0.94 | 0.61 | 13.4 | -22.6 | 90.5 | 98.4 | 68 |
| 1039 | Rume acet | X | | -10.87 | 2.15 | 10.8 | -50 | 39.4 | 57.6 | 38 |
| 1056 | Sagi nodo | 8 | ~ | -2.4 | 1.92 | 1 | -12.2 | 83.3 | 83.3 | 7 |
| 1069 | Sali cine | 9 | ~ | -8.41 | 3.62 | 6.6 | -100 | 65.5 | 79.3 | 34 |
| 1079 | Sali repe | X | | -6.58 | 3.3 | 4.6 | -38.6 | 58.3 | 66.7 | 15 |
| 1107 | Scho nigr | 9 | = | -2.49 | 0.82 | 9 | -38.6 | 78 | 88 | 112 |
| 1110 | Scir cesp | 9 | | -1.75 | 1.35 | 3.4 | -16.8 | 81.3 | 87.5 | 19 |
| 1119 | Scro auri | | | -13.48 | 7.1 | 0.4 | -100 | 46.2 | 69.2 | 14 |
| 1123 | Scut gale | 9 | = | -2.7 | 2.36 | 5.33 | -18 | 77.8 | 88.9 | 9 |
| 1144 | Serr tinc | X | | -7.11 | 2.36 | 8.4 | -34.5 | 68.2 | 77.3 | 25 |
| 1149 | Dant decu | X | | -5.64 | 1.92 | 3.6 | -22.75 | 64.7 | 70.6 | 19 |
| 1168 | Sola dulc | 8 | ~ | -22.85 | 17.77 | 4 | -100 | 60 | 60 | 6 |
| 1195 | Stel alsi | 8 | | -0.55 | 1.61 | 4.4 | -3.4 | 100 | 100 | 5 |
| 1205 | Succ prat | 7 | ~ | -4.69 | 0.64 | 10.8 | -50 | 68.6 | 80.9 | 219 |
| 1228 | Thel palu | 8 | | -8.27 | 3.09 | 0 | -21.2 | 33.3 | 66.7 | 6 |
| 1249 | Trif prat | X | | -10.9 | 3.51 | -3.2 | -38.6 | 33.3 | 55.6 | 10 |
| 1250 | Trif repe | X | | -5.54 | 1.69 | 0 | -13.4 | 50 | 75 | 9 |
| 1254 | Triq palu | 9 | = | -2.43 | 0.62 | 15.2 | -20.75 | 78.6 | 88.6 | 74 |
| 1260 | Tuss farf | 6 | ~ | -3.11 | 1.34 | 6 | -13.4 | 72.7 | 90.9 | 13 |
| 1268 | Urti dioi | 6 | | -13.75 | 8.78 | 11 | -100 | 63.6 | 63.6 | 12 |
| 1270 | Utri inte | 10 | | 1.99 | 1.11 | 14 | -3.67 | 100 | 100 | 16 |
| 1271 | Utri mino | 10 | | 2.79 | 1 | 13.4 | -0.8 | 100 | 100 | 15 |
| 1276 | Vacc oxyc | 9 | | -1.87 | 1.29 | 8 | -24.6 | 76.5 | 82.4 | 36 |
| 1280 | Vale dioi | 8 | ~ | -8.56 | 1.2 | 6 | -59 | 47.6 | 70.2 | 91 |

| NVC | Name | Ebg | Ind | Wtab mn | SE | Max | Min | %> -5 | %> -10 | N |
|---|---|---|---|---|---|---|---|---|---|---|
| 1281 | Vale offi | 8 | - | -5.51 | 1.64 | 5.8 | -30 | 58.3 | 79.2 | 25 |
| 1294 | Vero becc | 10 | | -3.13 | 1.01 | -1 | -5 | 100 | 100 | 4 |
| 1311 | Vici crac | 5 | | -12.65 | 3.26 | 8 | -100 | 30 | 66.7 | 34 |
| 1327 | Viol palu | 9 | | -1.53 | 0.99 | 10.8 | -50 | 81.6 | 88.2 | 85 |
| 1344 | Call cord | | | 0.81 | 2.46 | 13.4 | -13.4 | 81.8 | 81.8 | 12 |
| 1345 | Call cusp | | | -4.15 | 0.7 | 15.2 | -50 | 65.8 | 84.5 | 176 |
| 1346 | Call giga | | | 3.26 | 3.53 | 15.2 | -12.2 | 71.4 | 85.7 | 7 |
| 1348 | Call stra | | | 1.45 | 1.13 | 10.8 | -7.4 | 93.3 | 100 | 16 |
| 1382 | Aula palu | | | -2.24 | 1.01 | 13.4 | -23.25 | 70.4 | 81.5 | 64 |
| 1419 | Brac ruta | | | -12.11 | 4.59 | 4.2 | -100 | 57.1 | 71.4 | 25 |
| 1446 | Bryu pseu | | | -1.84 | 0.73 | 15.2 | -38.6 | 83.8 | 95.6 | 75 |
| 1471 | Camp stel | | | -3.45 | 0.63 | 9.2 | -36.5 | 72.8 | 85.3 | 149 |
| 1493 | Clim dend | | | -3.16 | 1.87 | 3.6 | -13.4 | 66.7 | 88.9 | 9 |
| 1496 | Crat comm | | | -2.22 | 0.89 | 6 | -16.2 | 85 | 95 | 22 |
| 1498 | Crat fili | | | -7.84 | 3.89 | 7.6 | -31.6 | 55.6 | 66.7 | 10 |
| 1500 | Cten moll | | | -3.74 | 0.76 | 8.4 | -34.5 | 67.7 | 89.2 | 71 |
| 1556 | Drep flui | | | 2.82 | 1.22 | 9 | -1.2 | 100 | 100 | 9 |
| 1558 | Drep revo | | | -1.86 | 0.43 | 8.4 | -16.2 | 79.4 | 93.8 | 105 |
| 1577 | Eurh prae | | | -12.97 | 4.13 | 8.4 | -100 | 40 | 64 | 27 |
| 1583 | Piss adia | | | -4.32 | 0.86 | 8.4 | -34.5 | 63.2 | 84.2 | 61 |
| 1666 | Hypn cupr | | | -4.85 | 2.73 | 24.6 | -36.5 | 61.1 | 72.2 | 22 |
| 1686 | Leuc glau | | | -2.03 | 2.59 | 6.4 | -10 | 66.7 | 100 | 6 |
| 1691 | Plag affi | | | -3.78 | 1.99 | 5.2 | -16.4 | 66.7 | 88.9 | 9 |
| 1695 | Plag rost | | | -1.79 | 1.12 | 6 | -12.4 | 73.7 | 94.7 | 20 |
| 1700 | Rhiz pseu | | | -1.16 | 3.2 | 9.2 | -7.8 | 60 | 100 | 5 |
| 1701 | Rhiz punc | | | -0.49 | 1.98 | 10.8 | -20.75 | 92.9 | 92.9 | 14 |
| 1704 | Plag elat | | | -4 | 5.7 | 8.4 | -18.8 | 50 | 75 | 4 |
| 1707 | Plag undu | | | -19.62 | 9.77 | 0 | -100 | 22.2 | 55.6 | 10 |
| 1745 | Phil calc | | | -1.05 | 0.69 | 5.2 | -6.4 | 89.5 | 100 | 21 |
| 1747 | Phil font | | | 0.43 | 0.27 | 1.8 | -0.6 | 100 | 100 | 8 |
| 1791 | Poly comm | | | -5.55 | 2.82 | 3.4 | -50 | 66.7 | 83.3 | 19 |
| 1814 | Pseu puru | | | -10.69 | 1.5 | 10.8 | -32.4 | 24.2 | 57.6 | 36 |
| 1847 | Scor scor | | | -0.14 | 0.53 | 8 | -15 | 90.6 | 96.2 | 56 |
| 1860 | Spha capi | | | 0.5 | 0.99 | 8 | -22.6 | 87.9 | 93.9 | 36 |
| 1862 | Spha cont | | | -0.85 | 1.57 | 3.75 | -13.8 | 81.8 | 90.9 | 11 |
| 1863 | Spha cusp | | | 2.34 | 0.99 | 11.2 | -9.4 | 89.5 | 100 | 20 |
| 1864 | Spha fimb | | | -14.18 | 8.36 | -0.2 | -50 | 66.7 | 66.7 | 6 |
| 1869 | Spha mage | | | 2.75 | 0.86 | 7.4 | -5 | 100 | 100 | 15 |
| 1871 | Spha palu | | | -3.04 | 1.02 | 15 | -50 | 71.6 | 78.4 | 93 |
| 1872 | Spha papi | | | -0.42 | 0.66 | 11.2 | -22.75 | 83.7 | 90.7 | 91 |
| 1873 | Spha subn | | | -1.6 | 0.61 | 13.4 | -34.5 | 81.3 | 88.3 | 141 |
| 1876 | Spha recu | | | 0.39 | 0.8 | 24.6 | -50 | 87.5 | 92.3 | 115 |
| 1880 | Spha squa | | | -4.25 | 2.82 | 10.8 | -16 | 50 | 75 | 10 |
| 1884 | Spha tene | | | 1.67 | 1.76 | 10 | -1.8 | 100 | 100 | 6 |
| 1885 | Spha tere | | | 0.88 | 0.94 | 3 | -2.4 | 100 | 100 | 6 |
| 1980 | Caly muel | | | -0.05 | 1.35 | 8 | -7.75 | 88.9 | 100 | 9 |
| 1986 | Ceph bicu | | | 4.8 | 1.19 | 7.8 | 2.2 | 100 | 100 | 4 |
| 2004 | Chil poly | | | -8.23 | 3.99 | 5 | -19 | 50 | 50 | 6 |
| 2067 | Loph bide | | | -8.86 | 3.28 | 8.4 | -100 | 53.3 | 76.7 | 31 |
| 2083 | Marc poly | | | 0.24 | 2.89 | 10.8 | -20 | 88.9 | 88.9 | 10 |
| 2118 | Odon spha | | | -0.89 | 1.81 | 6.8 | -16.8 | 81.8 | 90.9 | 14 |
| 2122 | Pell endi | | | -3.17 | 0.61 | 0.4 | -9.4 | 81.3 | 100 | 18 |

| NVC | Name | Ebg | Ind | Wtab mn | SE | Max | Min | %> -5 | %> -10 | N |
|---|---|---|---|---|---|---|---|---|---|---|
| 2123 | Pell epip | | | -0.57 | 0.96 | 8 | -16 | 90 | 95 | 24 |
| 2154 | Ricc mult | | | -2.14 | 0.81 | 8.4 | -15 | 74.3 | 88.6 | 38 |
| 2156 | Aneu ping | | | -1.69 | 0.64 | 13.4 | -32.4 | 78 | 90.1 | 97 |
| 2157 | Ricc cham | | | -0.02 | 1.07 | 13.4 | -5.8 | 87.5 | 100 | 17 |
| 2627 | Spha auri | | | 1.99 | 0.42 | 16 | -12.6 | 96 | 99 | 108 |
| 2641 | Cirs diss | | | -4.94 | 1.79 | 13.4 | -36.5 | 63.9 | 75 | 44 |
| 2659 | Junc subn | 8 | | -8.04 | 1.25 | 11 | -100 | 49.6 | 73.5 | 121 |
| 2687 | Rubu frut | 5 | | -21.15 | 7.06 | -2.2 | -44 | 25 | 50 | 8 |
| 2703 | Euph nemo | 5 | | -5.28 | 1.37 | 0.2 | -36.5 | 62.1 | 79.3 | 32 |
| 2705 | Euph scot | | | 0.2 | 0.47 | 1.6 | -1.8 | 100 | 100 | 6 |
| 2766 | Erio grac | 9 | = | 7.25 | 2.75 | 13.4 | 0 | 100 | 100 | 4 |
| 3125 | Peuc palu | 9 | = | -10.41 | 3.52 | -3.2 | -23.25 | 20 | 60 | 5 |

Table 5 Summer water levels conditions associated with fen plant species recorded from valley fen systems in East Anglia. For selection criteria for species included in the table, see text.

Water level and fertility data are derived from all lowland valley fen sites, except those of Eastern England

Water table values are expressed as cm relative to the soil surface

Ebg: Ellenberg 'moisture value'
Ind: ~ species associated with fluctuating water conditions (Ellenberg)
▫ species found in sites that are periodically inundated (Ellenberg)

%> -5; %>-10: % occurrences found in sites with summer water table less than 5 and 10 cm below the surface

| NVC | Name | Ebg | Ind | Wtab | SE | Max | Min | %> -5 | %> -10 | Fert | N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | Agro cani | 9 | | -1.7 | 1.16 | 10 | -24.6 | 81.3 | 84.4 | 10.15 | 39 |
| 63 | Anag tene | | | -2.47 | 0.68 | 13.4 | -36.5 | 76 | 91.7 | 6.7 | 109 |
| 132 | Beru erec | 10 | ~ | 2.2 | 2.4 | 7 | -0.4 | 100 | 100 | 16.54 | 3 |
| 179 | Calt palu | 8 | ▫ | -4.47 | 1.22 | 15.2 | -50 | 68 | 77.3 | 14.59 | 80 |
| 195 | Card prat | 7 | | -0.95 | 1.01 | 15.2 | -22.75 | 74.6 | 87.3 | 15.8 | 67 |
| 202 | Care acut | 9 | ~ | -6 | 1.85 | 7 | -25 | 52.4 | 76.2 | 17.9 | 21 |
| 211 | Care curt | 9 | | -1.16 | 2.36 | 10.8 | -59 | 80.8 | 96.2 | 14.23 | 29 |
| 212 | Care demi | 8 | | -0.36 | 0.46 | 8 | -15 | 90.3 | 94.4 | 6.88 | 81 |
| 213 | Care dian | 9 | = | 4.34 | 1.94 | 15.2 | -12.2 | 84.6 | 92.3 | 13.74 | 15 |
| 215 | Care dioi | 9 | | -0.86 | 0.61 | 10.8 | -14.75 | 83.3 | 92.6 | 7.41 | 58 |
| 219 | Care echi | 8 | ~ | -1.29 | 0.56 | 10.8 | -31.6 | 82 | 87.8 | 8.45 | 154 |
| 223 | Care flac | 6 | ~ | -6.66 | 1.12 | 6 | -48.4 | 61.6 | 78.1 | 7.52 | 85 |
| 225 | Care host | 9 | | -5.91 | 1.05 | 1 | -48.4 | 66.2 | 80.5 | 6.8 | 84 |
| 228 | Care lasi | 9 | = | 1.54 | 1.47 | 8.8 | -22 | 94.4 | 94.4 | 7.16 | 19 |
| 229 | Care lepi | 8 | | -2.27 | 0.72 | 14.6 | -34.5 | 75 | 90 | 7.52 | 83 |
| 230 | Care limo | 9 | = | 3.86 | 0.79 | 10 | -2.5 | 100 | 100 | 6.39 | 20 |
| 233 | Care nigr | 8 | ~ | -2.23 | 0.98 | 15.2 | -59 | 79.1 | 85.5 | 10.73 | 116 |
| 237 | Care oval | | | -0.4 | | -0.4 | -0.4 | 100 | 100 | 8.44 | 2 |
| 240 | Care pani | 9 | = | -3.63 | 1.43 | 7 | -22 | 63.6 | 90.9 | 14.02 | 24 |
| 247 | Care puli | 9 | | -5.51 | 1.23 | 8 | -48.4 | 68.8 | 79.7 | 7.25 | 72 |
| 252 | Care rost | 10 | | 0.04 | 0.87 | 16 | -59 | 85.2 | 90.4 | 10.16 | 124 |
| 367 | Dact inca | 8 | ~ | -3.03 | 1.3 | 8.4 | -34.5 | 67.4 | 83.7 | 8.62 | 45 |
| 368 | Dact macu | X | | -2.63 | 1.53 | 7.8 | -34.5 | 70 | 83.3 | 6.91 | 33 |
| 370 | Dact maja | 8 | ~ | -1.88 | 0.64 | 1.4 | -5.6 | 86.7 | 100 | 7.43 | 16 |
| 371 | Dact trau | 9 | = | -1.03 | 1.86 | 8.4 | -5.8 | 71.4 | 100 | 6.69 | 7 |
| 392 | Dros angl | 9 | = | 1.93 | 0.9 | 9 | -5.4 | 94.1 | 100 | 6 | 21 |
| 393 | Dros inte | 9 | = | 0.83 | 0.86 | 8.8 | -15 | 90 | 96.7 | 5.72 | 32 |
| 394 | Dros rotu | 9 | | -0.29 | 0.45 | 15 | -24.6 | 85.5 | 91.9 | 6.31 | 184 |
| 408 | Eleo mult | | | 0.84 | 0.56 | 13.4 | -15 | 86.8 | 96.1 | 5.8 | 82 |
| 409 | Eleo palu | 10 | ▫ | 4.4 | | 4.4 | 4.4 | 100 | 100 | | 1 |
| 410 | Eleo quin | 9 | | -1.51 | 0.37 | 2.2 | -13.8 | 87.1 | 96.8 | 6.32 | 67 |

| NVC | Name | Ebg | Ind | Wtab | SE | Max | Min | %> -5 | %> -10 | Fert | N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 425 | Epil palu | 9 | | -1.91 | 1.02 | 15.2 | -50 | 76 | 86.7 | 13.63 | 86 |
| 433 | Equi fluv | 10 | | -2.27 | 1.25 | 16 | -50 | 75.3 | 83.1 | 12.27 | 88 |
| 435 | Equi palu | X | | -3.67 | 0.73 | 13.4 | -34.5 | 71 | 86 | 11.21 | 114 |
| 446 | Erio angu | 9 | = | -0.24 | 0.41 | 16 | -59 | 86.3 | 92.8 | 7.99 | 285 |
| 447 | Erio lati | 9 | | -3.52 | 0.71 | 6 | -18.8 | 68.9 | 88.9 | 6.04 | 49 |
| 509 | Gali palu | 9 | = | -2.18 | 1.27 | 15.2 | -50 | 76.2 | 82.5 | 15.42 | 77 |
| 533 | Geum riva | 8 | = | -5.7 | 3.3 | -2.4 | -9 | 50 | 100 | 18.71 | 2 |
| 551 | Hamm palu | | | 0.12 | 2.89 | 7.4 | -10.4 | 80 | 80 | 4.57 | 5 |
| 590 | Hydr vulg | 9 | ~ | -4.17 | 0.87 | 16 | -50 | 68.2 | 81.3 | 10.15 | 122 |
| 596 | Hype elod | 9 | = | 2.31 | 0.77 | 16 | -8.2 | 97.1 | 100 | 6.88 | 37 |
| 615 | Iris pseu | 10 | | -1.38 | 5.54 | 15.2 | -38 | 87.5 | 87.5 | 18.12 | 8 |
| 619 | Junc acut | 8 | | -1.78 | 0.64 | 16 | -50 | 81.5 | 87.9 | 9.15 | 195 |
| 622 | Junc arti | 8 | ~ | -2.5 | 0.69 | 14.6 | -32.4 | 77.6 | 88.2 | 9.54 | 96 |
| 626 | Junc bulb | | | 0.03 | 0.62 | 13.4 | -22.6 | 87.5 | 92.5 | 7 | 86 |
| 629 | Junc conq | 7 | ~ | -3.01 | 3.48 | 15.2 | -48.4 | 64.3 | 85.7 | 13.03 | 18 |
| 630 | Junc effu | 7 | ~ | -3.13 | 1.64 | 15.2 | -59 | 76.9 | 86.5 | 12.44 | 60 |
| 665 | Lemn mino | 11 | | 0.45 | 4.41 | 11 | -9.4 | 75 | 100 | 20.06 | 4 |
| 723 | Lyco euro | 9 | = | -3.9 | 0.5 | -3.4 | -4.4 | 100 | 100 | 8.11 | 2 |
| 726 | Lysi numm | | | 0 | | 0 | 0 | 100 | 100 | 24.52 | 1 |
| 755 | Ment aqua | 9 | = | -4.84 | 0.9 | 15.2 | -50 | 67.3 | 81.3 | 11.62 | 121 |
| 762 | Meny trif | 9 | = | -0.17 | 0.7 | 16 | -59 | 84.3 | 90.2 | 9.54 | 164 |
| 786 | Myos laxa | 8 | ~ | -3.57 | 2.89 | 9.2 | -50 | 80 | 80 | 14.93 | 20 |
| 789 | Myos scor | 8 | ~ | -6.2 | | -6.2 | -6.2 | 0 | 100 | 21.99 | 1 |
| 801 | Nart ossi | 9 | | 0.26 | 0.46 | 15 | -24.6 | 86.9 | 92.8 | 6.43 | 163 |
| 810 | Oena fist | 9 | = | -2.4 | | -2.4 | -2.4 | 100 | 100 | 13.16 | 1 |
| 844 | Parn palu | 8 | ~ | -4.32 | 0.99 | 8.4 | -38.6 | 66.7 | 85.2 | 7.61 | 56 |
| 846 | Pedi palu | 9 | = | -0.76 | 0.53 | 13.4 | -18.4 | 84.5 | 91.3 | 8.4 | 110 |
| 847 | Pedi sylv | 8 | ~ | -1.34 | 1.05 | 2.2 | -9.2 | 76.9 | 100 | 5.81 | 13 |
| 855 | Phal arun | 8 | = | 1.55 | 1.97 | 5.4 | -3 | 100 | 100 | 16.33 | 4 |
| 861 | Phra aust | 10 | ~ | -6.48 | 1.6 | 24.6 | -100 | 63.7 | 77.5 | 9.71 | 106 |
| 870 | Ping vulg | 8 | | -2.83 | 0.67 | 8.4 | -34.5 | 78.4 | 89.8 | 6.21 | 95 |
| 877 | Plat bifo | 5 | ~ | 2.52 | 2.05 | 8.4 | -1 | 100 | 100 | 6.71 | 4 |
| 894 | Poly serp | 6 | | -1.55 | 1.05 | 5.6 | -10.4 | 73.7 | 94.7 | 5.39 | 21 |
| 898 | Poly amph | 11 | | -9.2 | | -9.2 | -9.2 | 0 | 100 | | 1 |
| 925 | Pota colo | 12 | | 3.75 | 1.31 | 6 | 1 | 100 | 100 | 5.19 | 4 |
| 937 | Pota poly | 12 | | 1.81 | 0.39 | 14 | -13.8 | 95.2 | 98.1 | 6.73 | 115 |
| 949 | Pote palu | 10 | | -1.44 | 1.5 | 16 | -59 | 79.4 | 91.2 | 12.51 | 75 |
| 989 | Ranu flam | 9 | ~ | 0.68 | 0.56 | 16 | -22 | 89.9 | 92.9 | 10.04 | 114 |
| 993 | Ranu ling | 10 | | -4.4 | | -4.4 | -4.4 | 100 | 100 | 11.37 | 1 |
| 1009 | Rhyn alba | 9 | = | 0.94 | 0.61 | 13.4 | -22.6 | 90.5 | 98.4 | 5.64 | 68 |
| 1042 | Rume conq | | | 0.4 | | 0.4 | 0.4 | 100 | 100 | 20.34 | 1 |
| 1044 | Rume hydr | 10 | | 3.6 | | 3.6 | 3.6 | 100 | 100 | 15.11 | 1 |
| 1056 | Sagi nodo | 8 | ~ | -2.4 | 1.92 | 1 | -12.2 | 83.3 | 83.3 | 11.82 | 7 |
| 1107 | Scho nigr | 9 | = | -2.49 | 0.82 | 9 | -38.6 | 78 | 88 | 6.66 | 112 |
| 1110 | Scir cesp | 9 | | -1.75 | 1.35 | 3.4 | -16.8 | 81.3 | 87.5 | 6.32 | 19 |
| 1123 | Scut gale | 9 | = | -2.7 | 2.36 | 5.33 | -18 | 77.8 | 88.9 | 10.7 | 9 |
| 1144 | Serr tinc | X | | -7.11 | 2.36 | 8.4 | -34.5 | 68.2 | 77.3 | 5.96 | 25 |
| 1180 | Spar erec | 10 | | -3.7 | 3.7 | 0 | -7.4 | 50 | 100 | 15.5 | 2 |
| 1195 | Stel alsi | 8 | | -0.55 | 1.61 | 4.4 | -3.4 | 100 | 100 | 17.7 | 5 |
| 1205 | Succ prat | 7 | ~ | -4.69 | 0.64 | 10.8 | -50 | 68.6 | 80.9 | 7.85 | 219 |

| NVC | Name | Ebg | Ind | Wtab | SE | Max | Min | %> -5 | %> -10 | Fert | N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1254 | Trig palu | 9 | ▫ | -2.43 | 0.62 | 15.2 | -20.75 | 78.6 | 88.6 | 7.85 | 74 |
| 1262 | Typh lati | 10 | | -3.9 | 0.41 | -3.4 | -4.4 | 100 | 100 | 8.11 | 3 |
| 1270 | Utri inte | 10 | | 1.99 | 1.11 | 14 | -3.67 | 100 | 100 | 6.47 | 16 |
| 1271 | Utri mino | 10 | | 2.79 | 1 | 13.4 | -0.8 | 100 | 100 | 6 | 15 |
| 1272 | Utri aust | | | 6 | | 6 | 6 | 100 | 100 | 5.73 | 1 |
| 1273 | Utri vulg | 12 | | 11.3 | 3.3 | 14.6 | 8 | 100 | 100 | 19.69 | 2 |
| 1276 | Vacc oxyc | 9 | | -1.87 | 1.29 | 8 | -24.6 | 76.5 | 82.4 | 8.09 | 36 |
| 1294 | Vero becc | 10 | | -3.13 | 1.01 | -1 | -5 | 100 | 100 | 15.15 | 4 |
| 1327 | Viol palu | 9 | | -1.53 | 0.99 | 10.8 | -50 | 81.6 | 88.2 | 11.77 | 85 |
| 1344 | Call cord | | | 0.81 | 2.46 | 13.4 | -13.4 | 81.8 | 81.8 | 13.57 | 12 |
| 1345 | Call cusp | | | -4.15 | 0.7 | 15.2 | -50 | 65.8 | 84.5 | 10.4 | 176 |
| 1346 | Call giga | | | 3.26 | 3.53 | 15.2 | -12.2 | 71.4 | 85.7 | 15.84 | 7 |
| 1348 | Call stra | | | 1.45 | 1.13 | 10.8 | -7.4 | 93.3 | 100 | 14.03 | 16 |
| 1382 | Aula palu | | | -2.24 | 1.01 | 13.4 | -23.25 | 70.4 | 81.5 | 9.64 | 64 |
| 1446 | Bryu pseu | | | -1.84 | 0.73 | 15.2 | -38.6 | 83.8 | 95.6 | 7.66 | 75 |
| 1463 | Homa nite | | | -3.52 | 5.62 | 2.2 | -14.75 | 66.7 | 66.7 | 9.21 | 3 |
| 1471 | Camp stel | | | -3.45 | 0.63 | 9.2 | -36.5 | 72.8 | 85.3 | 6.55 | 149 |
| 1496 | Crat comm | | | -2.22 | 0.89 | 6 | -16.2 | 85 | 95 | 7.48 | 22 |
| 1558 | Drep revo | | | -1.86 | 0.43 | 8.4 | -16.2 | 79.4 | 93.8 | 6.55 | 105 |
| 1560 | Drep unci | | | 10.8 | | 10.8 | 10.8 | 100 | 100 | 12.91 | 1 |
| 1583 | Fiss adia | | | -4.32 | 0.86 | 8.4 | -34.5 | 63.2 | 84.2 | 6.48 | 61 |
| 1686 | Leuc glau | | | -2.03 | 2.59 | 6.4 | -10 | 66.7 | 100 | 5.02 | 6 |
| 1691 | Plag affi | | | -3.78 | 1.99 | 5.2 | -16.4 | 66.7 | 88.9 | 10.61 | 9 |
| 1695 | Plag rost | | | -1.79 | 1.12 | 6 | -12.4 | 73.7 | 94.7 | 11.13 | 20 |
| 1700 | Rhiz pseu | | | -1.16 | 3.2 | 9.2 | -7.8 | 60 | 100 | 13.66 | 5 |
| 1701 | Rhiz punc | | | -0.49 | 1.98 | 10.8 | -20.75 | 92.9 | 92.9 | 12 | 14 |
| 1745 | Phil calc | | | -1.05 | 0.69 | 5.2 | -6.4 | 89.5 | 100 | 7.05 | 21 |
| 1747 | Phil font | | | 0.43 | 0.27 | 1.8 | -0.6 | 100 | 100 | 10.01 | 8 |
| 1847 | Scor scor | | | -0.14 | 0.53 | 8 | -15 | 90.6 | 96.2 | 6.25 | 56 |
| 1860 | Spha capi | | | 0.5 | 0.99 | 8 | -22.6 | 87.9 | 93.9 | 6.58 | 36 |
| 1862 | Spha cont | | | -0.85 | 1.57 | 3.75 | -13.8 | 81.8 | 90.9 | 7.95 | 11 |
| 1863 | Spha cusp | | | 2.34 | 0.99 | 11.2 | -9.4 | 89.5 | 100 | 5.36 | 20 |
| 1869 | Spha mage | | | 2.75 | 0.86 | 7.4 | -5 | 100 | 100 | 5.31 | 15 |
| 1871 | Spha palu | | | -3.04 | 1.02 | 15 | -50 | 71.6 | 78.4 | 9.5 | 93 |
| 1872 | Spha papi | | | -0.42 | 0.66 | 11.2 | -22.75 | 83.7 | 90.7 | 5.63 | 91 |
| 1873 | Spha subn | | | -1.6 | 0.61 | 13.4 | -34.5 | 81.3 | 88.3 | 7.73 | 141 |
| 1876 | Spha recu | | | 0.39 | 0.8 | 24.6 | -50 | 87.5 | 92.3 | 9.09 | 115 |
| 1883 | Spha subs | | | 0.87 | 1.65 | 6.8 | -11 | 88.9 | 88.9 | 9.46 | 10 |
| 1884 | Spha tene | | | 1.67 | 1.76 | 10 | -1.8 | 100 | 100 | 6.61 | 6 |
| 1885 | Spha tere | | | 0.88 | 0.94 | 3 | -2.4 | 100 | 100 | 20.28 | 6 |
| 2083 | Marc poly | | | 0.24 | 2.89 | 10.8 | -20 | 88.9 | 88.9 | 14.51 | 10 |
| 2118 | Odon spha | | | -0.89 | 1.81 | 6.8 | -16.8 | 81.8 | 90.9 | 5.36 | 14 |
| 2122 | Pell endi | | | -3.17 | 0.61 | 0.4 | -9.4 | 81.3 | 100 | 8.42 | 18 |
| 2123 | Pell epip | | | -0.57 | 0.96 | 8 | -16 | 90 | 95 | 9.23 | 24 |
| 2143 | Prei quad | | | -0.73 | 0.73 | 0 | -2.2 | 100 | 100 | 5.08 | 3 |
| 2154 | Ricc mult | | | -2.14 | 0.81 | 8.4 | -15 | 74.3 | 88.6 | 6 | 38 |
| 2156 | Aneu ping | | | -1.69 | 0.64 | 13.4 | -32.4 | 78 | 90.1 | 6.8 | 97 |
| 2157 | Ricc cham | | | -0.02 | 1.07 | 13.4 | -5.8 | 87.5 | 100 | 7.14 | 17 |
| 2627 | Spha auri | | | 1.99 | 0.42 | 16 | -12.6 | 96 | 99 | 7.26 | 108 |
| 2766 | Erio grac | 9 | = | 7.25 | 2.75 | 13.4 | 0 | 100 | 100 | 6.49 | 4 |

Table 6 Summer water level conditions associated with poor-fen plant species recorded from valley fen systems in East Anglia. For selection criteria for species included in the table, see text.

Water level and fertility data are derived from all lowland valley fen sites, except those of Eastern England

Water table values are expressed as cm relative to the soil surface

Ebg: Ellenberg 'moisture value'
Ind: ~ species associated with fluctuating water conditions (Ellenberg)
= species found in sites that are periodically inundated (Ellenberg)

%> -5; %> -10: % occurrences found in sites with summer water table less than 5 and 10 cm below the surface

| NVC | Name | Ebg | Ind | Wtab mn | SE | Max | Min | %> -5 | %> -10 | Fert | N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | Agro cani | 9 | | -1.7 | 1.16 | 10 | -24.6 | 81.3 | 84.4 | 10.15 | 39 |
| 63 | Anag tene | | | -2.47 | 0.68 | 13.4 | -36.5 | 76 | 91.7 | 6.7 | 109 |
| 211 | Care curt | 9 | | -1.16 | 2.36 | 10.8 | -59 | 80.8 | 96.2 | 14.23 | 29 |
| 212 | Care demi | 8 | | -0.36 | 0.46 | 8 | -15 | 90.3 | 94.4 | 6.88 | 81 |
| 215 | Care dioi | 9 | | -0.86 | 0.61 | 10.8 | -14.75 | 83.3 | 92.6 | 7.41 | 58 |
| 219 | Care echi | 8 | ~ | -1.29 | 0.56 | 10.8 | -31.6 | 82 | 87.8 | 8.45 | 154 |
| 233 | Care nigr | 8 | ~ | -2.23 | 0.98 | 15.2 | -59 | 79.1 | 85.5 | 10.73 | 116 |
| 237 | Care oval | | | -0.4 | | -0.4 | -0.4 | 100 | 100 | 8.44 | 2 |
| 252 | Care rost | 10 | | 0.04 | 0.87 | 16 | -59 | 85.2 | 90.4 | 10.16 | 124 |
| 368 | Dact macu | X | | -2.63 | 1.53 | 7.8 | -34.5 | 70 | 83.3 | 6.91 | 33 |
| 393 | Dros inte | 9 | = | 0.83 | 0.86 | 8.8 | -15 | 90 | 96.7 | 5.72 | 32 |
| 394 | Dros rotu | 9 | | -0.29 | 0.45 | 15 | -24.6 | 85.5 | 91.9 | 6.31 | 184 |
| 408 | Eleo mult | | | 0.84 | 0.56 | 13.4 | -15 | 86.8 | 96.1 | 5.8 | 82 |
| 446 | Erio angu | 9 | = | -0.24 | 0.41 | 16 | -59 | 86.3 | 92.8 | 7.99 | 285 |
| 551 | Hamm palu | | | 0.12 | 2.89 | 7.4 | -10.4 | 80 | 80 | 4.57 | 5 |
| 596 | Hype elod | 9 | = | 2.31 | 0.77 | 16 | -8.2 | 97.1 | 100 | 6.88 | 37 |
| 619 | Junc acut | 8 | | -1.78 | 0.64 | 16 | -50 | 81.5 | 87.9 | 9.15 | 195 |
| 626 | Junc bulb | | | 0.03 | 0.62 | 13.4 | -22.6 | 87.5 | 92.5 | 7 | 86 |
| 801 | Nart ossi | 9 | | 0.26 | 0.46 | 15 | -24.6 | 86.9 | 92.8 | 6.43 | 163 |
| 847 | Pedi sylv | 8 | ~ | -1.34 | 1.05 | 2.2 | -9.2 | 76.9 | 100 | 5.81 | 13 |
| 870 | Ping vulg | 8 | | -2.83 | 0.67 | 8.4 | -34.5 | 78.4 | 89.8 | 6.21 | 95 |
| 937 | Pota poly | 12 | | 1.81 | 0.39 | 14 | -13.8 | 95.2 | 98.1 | 6.73 | 115 |
| 949 | Pote palu | 10 | | -1.44 | 1.5 | 16 | -59 | 79.4 | 91.2 | 12.51 | 75 |
| 989 | Ranu flam | 9 | ~ | 0.68 | 0.56 | 16 | -22 | 89.9 | 92.9 | 10.04 | 114 |
| 1009 | Rhyn alba | 9 | = | 0.94 | 0.61 | 13.4 | -22.6 | 90.5 | 98.4 | 5.64 | 68 |
| 1110 | Scir cesp | 9 | | -1.75 | 1.35 | 3.4 | -16.8 | 81.3 | 87.5 | 6.32 | 19 |
| 1271 | Utri mino | 10 | | 2.79 | 1 | 13.4 | -0.8 | 100 | 100 | 6 | 15 |
| 1276 | Vacc oxyc | 9 | | -1.87 | 1.29 | 8 | -24.6 | 76.5 | 82.4 | 8.09 | 36 |
| 1327 | Viol palu | 9 | | -1.53 | 0.99 | 10.8 | -50 | 81.6 | 88.2 | 11.77 | 85 |

| NVC | Name | Ebg | Ind | Wtab mn | SE | Max | Min | %> -5 | %> -10 | Fert | N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1348 | Call stra | | | 1.45 | 1.13 | 10.8 | -7.4 | 93.3 | 100 | 14.03 | 16 |
| 1382 | Aula palu | | | -2.24 | 1.01 | 13.4 | -23.25 | 70.4 | 81.5 | 9.64 | 64 |
| 1686 | Leuc glau | | | -2.03 | 2.59 | 6.4 | -10 | 66.7 | 100 | 5.02 | 6 |
| 1747 | Phil font | | | 0.43 | 0.27 | 1.8 | -0.6 | 100 | 100 | 10.01 | 8 |
| 1860 | Spha capi | | | 0.5 | 0.99 | 8 | -22.6 | 87.9 | 93.9 | 6.58 | 36 |
| 1862 | Spha cont | | | -0.85 | 1.57 | 3.75 | -13.8 | 81.8 | 90.9 | 7.95 | 11 |
| 1863 | Spha cusp | | | 2.34 | 0.99 | 11.2 | -9.4 | 89.5 | 100 | 5.36 | 20 |
| 1869 | Spha mage | | | 2.75 | 0.86 | 7.4 | -5 | 100 | 100 | 5.31 | 15 |
| 1871 | Spha palu | | | -3.04 | 1.02 | 15 | -50 | 71.6 | 78.4 | 9.5 | 93 |
| 1872 | Spha papi | | | -0.42 | 0.66 | 11.2 | -22.75 | 83.7 | 90.7 | 5.63 | 91 |
| 1873 | Spha subn | | | -1.6 | 0.61 | 13.4 | -34.5 | 81.3 | 88.3 | 7.73 | 141 |
| 1876 | Spha recu | | | 0.39 | 0.8 | 24.6 | -50 | 87.5 | 92.3 | 9.09 | 115 |
| 1883 | Spha subs | | | 0.87 | 1.65 | 6.8 | -11 | 88.9 | 88.9 | 9.46 | 10 |
| 1884 | Spha tene | | | 1.67 | 1.76 | 10 | -1.8 | 100 | 100 | 6.61 | 6 |
| 1885 | Spha tere | | | 0.88 | 0.94 | 3 | -2.4 | 100 | 100 | 20.28 | 6 |
| 2083 | Marc poly | | | 0.24 | 2.89 | 10.8 | -20 | 88.9 | 88.9 | 14.51 | 10 |
| 2118 | Odon spha | | | -0.89 | 1.81 | 6.8 | -16.8 | 81.8 | 90.9 | 5.36 | 14 |
| 2122 | Pell endi | | | -3.17 | 0.61 | 0.4 | -9.4 | 81.3 | 100 | 8.42 | 18 |
| 2156 | Aneu ping | | | -1.69 | 0.64 | 13.4 | -32.4 | 78 | 90.1 | 6.8 | 97 |
| 2627 | Spha auri | | | 1.99 | 0.42 | 16 | -12.6 | 96 | 99 | 7.26 | 108 |

Table 7 Summer water level conditions associated with fen plant species in valley fen systems in East Anglia. Mean values of fertility (phytometric assay) and % summer managed are also given.

All values are derived from Eastern England valley fens

Ebg: Ellenberg 'moisture value'
Ind: ~ species associated with fluctuating water conditions (Ellenberg)
= species found in sites that are periodically inundated (Ellenberg)

Water table values are expressed as cm relative to the soil surface.

%> -5; %>-10: % occurrences found in sites with summer water table less than 5 and 10 cm below the surface

| NVC | Name | Ebg | Ind | Wtab mn | SE | Max | Min | %> -5 | %> -10 | Fert | %man | N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 63 | Anag tene | | | -9.25 | 2.69 | -0.2 | -36.5 | 35.7 | 78.6 | 8.46 | 64.7 | 17 |
| 132 | Beru erec | 10 | ~ | 3.3 | 3.7 | 7 | -0.4 | 100 | 100 | 18.41 | 0 | 2 |
| 136 | Betu pube | X | | -3.48 | 2.53 | 3.8 | -23.2 | 60 | 90 | 6.88 | 20 | 10 |
| 195 | Card prat | 7 | | -6.44 | 2.64 | 8 | -21.2 | 50 | 80 | 18.88 | 63.6 | 11 |
| 202 | Care acut | 9 | ~ | -3.71 | 2.54 | 7 | -18 | 63.6 | 81.8 | 18.35 | 18.2 | 11 |
| 213 | Care dian | 9 | = | -3.33 | 5.96 | 8 | -12.2 | 33.3 | 66.7 | 9.04 | 100 | 3 |
| 215 | Care dioi | 9 | | -4.85 | 1.04 | -1.8 | -6.4 | 25 | 100 | 6.09 | 50 | 4 |
| 220 | Care elat | 10 | ~ | -3.72 | 3.3 | 8 | -12.2 | 60 | 80 | 12.02 | 60 | 5 |
| 229 | Care lepi | 8 | | -3.5 | 1.29 | 5.2 | -12.2 | 58.3 | 91.7 | 7.6 | 50 | 12 |
| 252 | Care rost | 10 | | -10.36 | 11.29 | 8 | -59 | 60 | 80 | 6.31 | 66.7 | 6 |
| 371 | Dact trau | 9 | = | -3.8 | 2 | -1.8 | -5.8 | 50 | 100 | 7.9 | 50 | 2 |
| 392 | Dros angl | 9 | = | -0.67 | 2.7 | 5.2 | -5.4 | 66.7 | 100 | 6.79 | 25 | 4 |
| 408 | Eleo mult | | | -6.7 | 1.5 | -5.2 | -8.2 | 0 | 100 | 5.84 | 0 | 2 |
| 410 | Eleo quin | 9 | | -2.67 | 1.9 | -0.2 | -6.4 | 66.7 | 100 | 6.5 | 33.3 | 3 |
| 432 | Equi arve | 6 | ~ | -6.4 | 1.59 | -2.2 | -16.4 | 42.9 | 85.7 | 12.48 | 55.6 | 9 |
| 435 | Equi palu | X | | -3.95 | 0.88 | 8 | -16.4 | 60.6 | 87.9 | 12.24 | 42.9 | 35 |
| 447 | Erio lati | 9 | | -4.35 | 0.95 | -1.2 | -5.8 | 50 | 100 | 6.02 | 100 | 5 |
| 509 | Gali palu | 9 | = | -2.64 | 3.16 | 8 | -18 | 80 | 80 | 15.53 | 55.6 | 9 |
| 596 | Hype elod | 9 | = | -8.2 | | -8.2 | -8.2 | 0 | 100 | 7.16 | 0 | 1 |
| 665 | Lemn mino | 11 | | 0.1 | 3.5 | 3.6 | -3.4 | 100 | 100 | 19.39 | 50 | 2 |
| 762 | Meny trif | 9 | = | -6.67 | 4.28 | 8 | -59 | 57.1 | 78.6 | 9.59 | 42.9 | 14 |
| 786 | Myos laxa | 8 | ~ | -3.4 | | -3.4 | -3.4 | 100 | 100 | 23.67 | 100 | 1 |
| 789 | Myos scor | 8 | ~ | -6.2 | | -6.2 | -6.2 | 0 | 100 | 21.99 | 0 | 1 |
| 810 | Oena fist | 9 | = | -2.4 | | -2.4 | -2.4 | 100 | 100 | 13.16 | 0 | 1 |
| 846 | Pedi palu | 9 | = | -4.24 | 1.76 | 8 | -12.4 | 50 | 80 | 9.15 | 41.7 | 12 |
| 870 | Ping vulg | 8 | | -5.94 | 4.08 | 5.2 | -32.4 | 57.1 | 85.7 | 6.84 | 77.8 | 9 |
| 989 | Ranu flam | 9 | ~ | -2.1 | 2.7 | 8 | -8.2 | 50 | 100 | 9.5 | 71.4 | 7 |
| 1009 | Rhyn alba | 9 | = | -0.7 | 4.5 | 3.8 | -5.2 | 50 | 100 | 4.7 | 0 | 2 |
| 1044 | Rume hydr | 10 | | 3.6 | | 3.6 | 3.6 | 100 | 100 | 15.11 | 0 | 1 |
| 1069 | Sali cine | 9 | ~ | -4.24 | 2.15 | 1.2 | -11.4 | 60 | 80 | 15.33 | 20 | 5 |
| 1119 | Scro auri | | | -5.17 | 2.08 | 0.4 | -18 | 62.5 | 87.5 | 19.6 | 25 | 8 |
| 1168 | Sola dulc | 8 | ~ | -0.53 | 2.27 | 4 | -3 | 100 | 100 | 17.73 | 0 | 3 |
| 1276 | Vacc oxyc | 9 | | -3.55 | 3.61 | 5.2 | -24.6 | 62.5 | 75 | 4.05 | 12.5 | 8 |
| 1294 | Vero becc | 10 | | -3.4 | | -3.4 | -3.4 | 100 | 100 | 23.67 | 100 | 1 |

| NVC | Name | Ebg | Ind | Wtab mn | SE | Max | Min | %> -5 | %> -10 | Fert | %man | N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1345 | Call cusp | | | -7.9 | 1.63 | 8 | -38.6 | 44.1 | 76.5 | 11.41 | 57.5 | 40 |
| 1419 | Brac ruta | | | -9.49 | 3.93 | -0.4 | -48.4 | 54.5 | 81.8 | 15.88 | 61.5 | 13 |
| 1496 | Crat comm | | | -1.2 | 1 | -0.2 | -2.2 | 100 | 100 | 11.56 | 50 | 2 |
| 1500 | Cten moll | | | -4.47 | 1.96 | 5.2 | -16.4 | 50 | 87.5 | 8.36 | 50 | 10 |
| 1558 | Drep revo | | | -2.29 | 0.96 | 5.2 | -6.4 | 63.6 | 100 | 7.81 | 50 | 14 |
| 1577 | Eurh prae | | | -5.43 | 1.97 | -0.4 | -16.4 | 71.4 | 85.7 | 16.33 | 42.9 | 7 |
| 1583 | Fiss adia | | | -6.13 | 1.73 | 1.2 | -16.4 | 33.3 | 77.8 | 7.81 | 60 | 10 |
| 1700 | Rhiz pseu | | | -5.1 | 1.5 | -3.6 | -6.6 | 50 | 100 | 13.95 | 100 | 2 |
| 1701 | Rhiz punc | | | -5 | | -5 | -5 | 100 | 100 | 6 | 100 | 1 |
| 1704 | Plag elat | | | -5.4 | | -5.4 | -5.4 | 0 | 100 | 5.05 | 100 | 1 |
| 1745 | Phil calc | | | -2.65 | 2.68 | 5.2 | -6.4 | 50 | 100 | 7.27 | 50 | 4 |
| 1847 | Scor scor | | | 5.2 | | 5.2 | 5.2 | 100 | 100 | 5.31 | 0 | 1 |
| 1863 | Spha cusp | | | -0.7 | 4.5 | 3.8 | -5.2 | 50 | 100 | 4.7 | 0 | 2 |
| 1872 | Spha papi | | | 0 | 1.9 | 3.8 | -5.2 | 75 | 100 | 3.6 | 0 | 4 |
| 1876 | Spha recu | | | -3.6 | 3.28 | 3.8 | -24.6 | 71.4 | 85.7 | 7.02 | 33.3 | 9 |
| 2122 | Pell endi | | | -0.2 | | -0.2 | -0.2 | 100 | 100 | 12.49 | 50 | 2 |
| 2157 | Ricc cham | | | -0.3 | 5.5 | 5.2 | -5.8 | 50 | 100 | 7.2 | 50 | 2 |
| 2627 | Spha auri | | | -5.2 | | -5.2 | -5.2 | 0 | 100 | 4.53 | 0 | 1 |

Table 8 Summer water level conditions associated with selected rich-fen plant species in valley fen systems in East Anglia. Species included are those that tend to occupy drier valley fen sites in Eastern England than in valley fens elsewhere in lowland Britain (mean EE value more than 5cm less than UK mean). Mean values of fertility (phytometric assay) and % summer managed are also given.

Ebg: Ellenberg 'moisture value'
Ind: - species associated with fluctuating water conditions (Ellenberg)
= species found in sites that are periodically inundated (Ellenberg)

Water table values are expressed as cm relative to the soil surface

| NVC | Name | Ebg | Ind | Wtab EA | Wtab UK | Fert | %man |
|---|---|---|---|---|---|---|---|
| 629 | Junc conq | 7 | - | -48.4 | -3.01 | 15.3 | 100 |
| 630 | Junc effu | 7 | - | -39.5 | -3.13 | 10.09 | 100 |
| 233 | Care nigr | 8 | - | -30.5 | -2.23 | 11.24 | 100 |
| 320 | Clad mari | 9 | | -23.01 | -14.6 | 9.68 | 54.5 |
| 225 | Care host | 9 | | -22.25 | -5.91 | 10.42 | 85.7 |
| 731 | Lyth sali | 8 | = | -19.4 | -10.06 | 16.31 | 60 |
| 709 | Luzu mult | 6 | - | -19.09 | -8.53 | 11.42 | 66.7 |
| 1123 | Scut gale | 9 | = | -18 | -2.7 | 20.22 | 0 |
| 946 | Pote erec | X | | -17.12 | -5.38 | 9.45 | 56.7 |
| 949 | Pote palu | 10 | | -17.05 | -1.44 | 9.19 | 75 |
| 1327 | Viol palu | 9 | | -15.72 | -1.53 | 9.18 | 33.3 |
| 1205 | Succ prat | 7 | - | -15.02 | -4.69 | 9.12 | 61.5 |
| 1079 | Sali repe | X | | -14.97 | -6.58 | 7.84 | 83.3 |
| 247 | Care puli | 9 | | -14.63 | -5.51 | 9.86 | 66.7 |
| 223 | Care flac | 6 | - | -14.09 | -6.66 | 9.08 | 70 |
| 713 | Lych flos | 6 | - | -14.03 | -5.62 | 15.15 | 72.2 |
| 702 | Lotu ulig | 8 | - | -13.32 | -7.9 | 13.32 | 61.3 |
| 239 | Care pani | 7 | - | -13.05 | -3.89 | 9.55 | 57.8 |
| 2641 | Cirs diss | | | -13.03 | -4.94 | 10.93 | 50 |
| 1056 | Sagi nodo | 8 | - | -12.2 | -2.4 | 6.44 | 100 |
| 1446 | Bryu pseu | | | -12.05 | -1.84 | 9.01 | 80 |
| 590 | Hydr vulg | 9 | - | -11.29 | -4.17 | 10.81 | 50 |
| 776 | Moli caer | 7 | - | -10.98 | -2.49 | 9.27 | 47.9 |
| 252 | Care rost | 10 | | -10.36 | 0.04 | 6.31 | 66.7 |
| 622 | Junc arti | 8 | - | -10.28 | -2.5 | 10.16 | 100 |
| 367 | Dact inca | 8 | - | -10.02 | -3.03 | 10.47 | 33.3 |
| 2156 | Aneu ping | | | -9.9 | -1.69 | 9.28 | 62.5 |
| 219 | Care echi | 8 | - | -9.72 | -1.29 | 6.52 | 50 |
| 844 | Parn palu | 8 | - | -9.42 | -4.32 | 8.58 | 55.6 |
| 446 | Erio angu | 9 | = | -9.26 | -0.24 | 5.88 | 43.8 |
| 63 | Anag tene | | | -9.25 | -2.47 | 8.46 | 64.7 |
| 1107 | Scho nigr | 9 | = | -9.19 | -2.49 | 9.22 | 56.5 |
| 1346 | Call giga | | | -9 | 3.26 | 6.99 | 100 |
| 1471 | Camp stel | | | -8.51 | -3.45 | 8.33 | 56.5 |
| 2154 | Ricc mult | | | -8.2 | -2.14 | 10.74 | 100 |
| 762 | Meny trif | 9 | = | -6.67 | -0.17 | 9.59 | 42.9 |
| 195 | Card prat | 7 | | -6.44 | -0.95 | 18.88 | 63.6 |
| 937 | Pota poly | 12 | | -4.2 | 1.81 | 6.92 | 66.7 |
| 213 | Care dian | 9 | = | -3.33 | 4.34 | 9.04 | 100 |

Table 9 Summer water level conditions associated with selected rich-fen plant species in valley fen systems in East Anglia. Species included are those that have fairly similar mean water table conditions in Eastern England valley fens and in valley fens elsewhere in lowland Britain (mean values are within 5cm of one another). Mean values of fertility (phytometric assay) and % summer managed are also given.

Ebg: Ellenberg 'moisture value'
Ind: ~ species associated with fluctuating water conditions (Ellenberg)
= species found in sites that are periodically inundated (Ellenberg)

Water table values are expressed as cm relative to the soil surface.

All values are derived from Eastern England valley fens

%> -5; %>-10: % occurrences found in sites with summer water table less than 5 and 10 cm below the surface

| NVC | Name | Ebg | Ind | Wtab EE | Wtab UK | Fert | %man |
|---|---|---|---|---|---|---|---|
| 1223 | Thal flav | 8 | ~ | -28.3 | -28.3 | 13.35 | 50 |
| 2572 | Care appr | 9 | = | -24.33 | -24.33 | 10.51 | 100 |
| 873 | Plan lanc | X | | -24.17 | -20.29 | 15.46 | 88.9 |
| 169 | Cala cane | 9 | ~ | -18.9 | -18.9 | 11.63 | 75 |
| 688 | List ovat | 6 | ~ | -15.2 | -17.25 | 14.07 | 66.7 |
| 549 | Gymn cono | 7 | ~ | -13.25 | -8.26 | 8.44 | 46.7 |
| 1280 | Vale dioi | 8 | ~ | -12.76 | -8.56 | 10.7 | 58.5 |
| 512 | Gali uliq | 8 | ~ | -11.66 | -8.71 | 12.69 | 55 |
| 1814 | Pseu puru | | | -11.47 | -10.69 | 11.7 | 70.6 |
| 483 | Fili ulma | 8 | | -11.4 | -8.54 | 15.3 | 50 |
| 431 | Epip palu | 8 | ~ | -11.35 | -8.1 | 8.85 | 58.6 |
| 67 | Ange sylv | 8 | | -11.33 | -8.31 | 13.66 | 42.2 |
| 861 | Phra aust | 10 | ~ | -11.17 | -6.48 | 10.73 | 33.3 |
| 366 | Dact fuch | X | | -11.05 | -8.94 | 13.27 | 60.9 |
| 369 | Dact maja | 8 | ~ | -10.89 | -8.57 | 9.03 | 57.1 |
| 603 | Hype tetr | 8 | = | -10.52 | -7.61 | 17.5 | 83.3 |
| 3125 | Peuc palu | 9 | = | -10.41 | -10.41 | 11.45 | 60 |
| 658 | Lath prat | 8 | | -10.36 | -7.67 | 13.76 | 36.4 |
| 318 | Cirs palu | 8 | ~ | -9.99 | -7.52 | 13.86 | 60.9 |
| 217 | Care dist | 9 | = | -9.92 | -11.39 | 13.46 | 53.8 |
| 1228 | Thel palu | 8 | | -9.92 | -8.27 | 10.94 | 80 |
| 2659 | Junc subn | 8 | | -9.73 | -8.04 | 12.36 | 45.8 |
| 730 | Lysi vulg | 8 | ~ | -9.6 | -9.4 | 10.35 | 100 |
| 1419 | Brac ruta | | | -9.49 | -12.11 | 15.88 | 61.5 |
| 1281 | Vale offi | 8 | ~ | -9.1 | -5.51 | 14.69 | 16.7 |
| 458 | Eupa cann | 7 | | -8.95 | -8.98 | 12.5 | 31 |
| 1345 | Call cusp | | | -7.9 | -4.15 | 11.41 | 57.5 |
| 755 | Ment aqua | 9 | = | -7.88 | -4.84 | 12.8 | 51.2 |
| 1691 | Plag affi | | | -7.65 | -3.78 | 8.89 | 50 |
| 2067 | Loph bide | | | -7.08 | -8.86 | 11.32 | 50 |
| 811 | Oena lach | | | -6.8 | -7.39 | 5.66 | 50 |
| 425 | Epil palu | 9 | | -6.67 | -1.91 | 9.52 | 100 |

| NVC | Name | Ebg | Ind | Wtab EE | Wtab UK | Fert | %man |
|---|---|---|---|---|---|---|---|
| 1873 | Spha subn | | | -6.3 | -1.6 | 8.96 | 37.5 |
| 789 | Myos scor | 8 | ~ | -6.2 | -6.2 | 21.99 | 0 |
| 1583 | Fiss adia | | | -6.13 | -4.32 | 7.81 | 60 |
| 179 | Calt palu | 8 | = | -6.09 | -4.47 | 16.69 | 33.3 |
| 870 | Ping vulg | 8 | | -5.94 | -2.83 | 6.84 | 77.8 |
| 240 | Care pani | 9 | = | -5.6 | -3.63 | 19.85 | 0 |
| 1704 | Plag elat | | | -5.4 | -4 | 5.05 | 100 |
| 1254 | Trig palu | 9 | = | -5.2 | -2.43 | 6.84 | 50 |
| 1700 | Rhiz pseu | | | -5.1 | -1.16 | 13.95 | 100 |
| 1701 | Rhiz punc | | | -5 | -0.49 | 6 | 100 |
| 215 | Care dioi | 9 | | -4.85 | -0.86 | 6.09 | 50 |
| 447 | Erio lati | 9 | | -4.35 | -3.52 | 6.02 | 100 |
| 619 | Junc acut | 8 | | -4.35 | -1.78 | 7.42 | 50 |
| 846 | Pedi palu | 9 | = | -4.24 | -0.76 | 9.15 | 41.7 |
| 433 | Equi fluv | 10 | | -4.1 | -2.27 | 15.58 | 63.6 |
| 435 | Equi palu | X | | -3.95 | -3.67 | 12.24 | 42.9 |
| 371 | Dact trau | 9 | = | -3.8 | -1.03 | 7.9 | 50 |
| 202 | Care acut | 9 | ~ | -3.71 | -6 | 18.35 | 18.2 |
| 1276 | Vacc oxyc | 9 | | -3.55 | -1.87 | 4.05 | 12.5 |
| 229 | Care lepi | 8 | | -3.5 | -2.27 | 7.6 | 50 |
| 786 | Myos laxa | 8 | ~ | -3.4 | -3.57 | 23.67 | 100 |
| 1294 | Vero becc | 10 | | -3.4 | -3.13 | 23.67 | 100 |
| 410 | Eleo quin | 9 | | -2.67 | -1.51 | 6.5 | 33.3 |
| 1745 | Phil calc | | | -2.65 | -1.05 | 7.27 | 50 |
| 509 | Gali palu | 9 | = | -2.64 | -2.18 | 15.53 | 55.6 |
| 810 | Oena fist | 9 | = | -2.4 | -2.4 | 13.16 | 0 |
| 1558 | Drep revo | | | -2.29 | -1.86 | 7.81 | 50 |
| 989 | Ranu flam | 9 | ~ | -2.1 | 0.68 | 9.5 | 71.4 |
| 1496 | Crat comm | | | -1.2 | -2.22 | 11.56 | 50 |
| 392 | Dros angl | 9 | = | -0.67 | 1.93 | 6.79 | 25 |
| 2157 | Ricc cham | | | -0.3 | -0.02 | 7.2 | 50 |
| 2122 | Pell endi | | | -0.2 | -3.17 | 12.49 | 50 |
| 665 | Lemn mino | 11 | | 0.1 | 0.45 | 19.39 | 50 |
| 132 | Beru erec | 10 | ~ | 3.3 | 2.2 | 18.41 | 0 |
| 1044 | Rume hydr | 10 | | 3.6 | 3.6 | 15.11 | 0 |

Table 10 Summer water level conditions associated with selected rich-fen plant species in valley fen systems in East Anglia. Species included are those that have a considerably higher (> 5 cm) mean summer water table in Eastern England valley fens compared with valley fens elsewhere in lowland Britain. Mean values of fertility (phytometric assay) and % summer managed are also given.

Ebg: Ellenberg 'moisture value'
Ind: - species associated with fluctuating water conditions (Ellenberg)
= species found in sites that are periodically inundated (Ellenberg)

Water table values are expressed as cm relative to the soil surface.

All values are derived from Eastern England valley fens

%> -5; %>-10: % occurrences found in sites with summer water table less than 5 and 10 cm below the surface

| NVC | Name | Ebg | Ind | Wtab EE | Wtab UK | Fert | %man |
|---|---|---|---|---|---|---|---|
| 421 | Epil hirs | 8 | = | -5.54 | -13.14 | 19.96 | 0 |
| 1577 | Eurh prae | | | -5.43 | -12.97 | 16.33 | 42.9 |
| 1119 | Scro auri | | | -5.17 | -13.48 | 19.6 | 25 |
| 220 | Care elat | 10 | - | -3.72 | -9.57 | 12.02 | 60 |
| 1168 | Sola dulc | 8 | - | -0.53 | -22.85 | 17.73 | 0 |

Table 11. Plant species of valley fens in East Anglia that may be particularly vulnerable to dehydration.

Note that in cases of severe and prolonged dehydration wetland species in addition to these listed may also be expected to disappear from valley-fen sites.

Ebg: Ellenberg 'moisture value'
Ind: ~ species associated with fluctuating water conditions (Ellenberg)
= species found in sites that are periodically inundated (Ellenberg)

Water table values are expressed as cm relative to the soil surface.

| NVC | Name | Ebg | Ind | Wtab UK | Wtab EE |
|---|---|---|---|---|---|
| 63 | Anag tene | | | -2.47 | -9.25 |
| 132 | Beru erec | 10 | w | 2.2 | 3.3 |
| 143 | Blys comp | | | -13.4 | |
| 179 | Calt palu | 8 | f | -4.47 | -6.09 |
| 211 | Care curt | 9 | | -1.16 | -59 |
| 212 | Care demi | 8 | | -0.36 | |
| 213 | Care dian | 9 | f | 4.34 | -3.33 |
| 215 | Care dioi | 9 | | -0.86 | -4.85 |
| 219 | Care echi | 8 | w | -1.29 | -9.72 |
| 220 | Care elat | 10 | w | -9.57 | -3.72 |
| 223 | Care flac | 6 | m | -6.66 | -14.09 |
| 225 | Care host | 9 | | -5.91 | -22.25 |
| 228 | Care lasi | 9 | f | 1.54 | |
| 229 | Care lepi | 8 | | -2.27 | -3.5 |
| 230 | Care limo | 9 | f | 3.86 | |
| 233 | Care nigr | 8 | w | -2.23 | -30.5 |
| 240 | Care pani | 9 | f | -3.63 | -5.6 |
| 252 | Care rost | 10 | | 0.04 | -10.36 |
| 371 | Dact trau | 9 | f | -1.03 | -3.8 |
| 392 | Dros angl | 9 | f | 1.93 | -0.67 |
| 393 | Dros inte | 9 | f | 0.83 | |
| 394 | Dros rotu | 9 | | -0.29 | -5.3 |
| 408 | Eleo mult | | | 0.84 | -6.7 |
| 425 | Epil palu | 9 | | -1.91 | -6.67 |
| 433 | Equi fluv | 10 | | -2.27 | -4.1 |
| 435 | Equi palu | X | | -3.67 | -3.95 |
| 446 | Erio angu | 9 | f | -0.24 | -9.26 |
| 447 | Erio lati | 9 | | -3.52 | -4.35 |
| 509 | Gali palu | 9 | f | -2.18 | -2.64 |
| 551 | Hamm palu | | | 0.12 | |
| 596 | Hype elod | 9 | f | 2.31 | -8.2 |
| 615 | Iris pseu | 10 | | -1.38 | |
| 626 | Junc bulb | | | 0.03 | 3.8 |
| 665 | Lemn mino | 11 | | 0.45 | 0.1 |
| 723 | Lyco euro | 9 | f | -3.9 | |
| 755 | Ment aqua | 9 | f | -4.84 | -7.88 |
| 762 | Meny trif | 9 | f | -0.17 | -6.67 |
| 786 | Myos laxa | 8 | w | -3.57 | -3.4 |

| NVC | Name | Ebg | Ind | Wtab UK | Wtab EE |
|---|---|---|---|---|---|
| 789 | Myos scor | 8 | w | -6.2 | -6.2 |
| 801 | Nart ossi | 9 | | 0.26 | -9.95 |
| 810 | Oena fist | 9 | f | -2.4 | -2.4 |
| 844 | Parn palu | 8 | w | -4.32 | -9.42 |
| 846 | Pedi palu | 9 | f | -0.76 | -4.24 |
| 847 | Pedi sylv | 8 | w | -1.34 | |
| 870 | Ping vulg | 8 | | -2.83 | -5.94 |
| 925 | Pota colo | 12 | | 3.75 | |
| 937 | Pota poly | 12 | | 1.81 | -4.2 |
| 949 | Pote palu | 10 | | -1.44 | -17.05 |
| 989 | Ranu flam | 9 | w | 0.68 | -2.1 |
| 993 | Ranu ling | 10 | | -4.4 | |
| 1009 | Rhyn alba | 9 | f | 0.94 | -0.7 |
| 1044 | Rume hydr | 10 | | 3.6 | 3.6 |
| 1254 | Trig palu | 9 | f | -2.43 | -5.2 |
| 1270 | Utri inte | 10 | | 1.99 | |
| 1271 | Utri mino | 10 | | 2.79 | |
| 1273 | Utri vulg | 12 | | 11.3 | 8 |
| 1294 | Vero becc | 10 | | -3.13 | -3.4 |
| 1305 | Vero scut | 9 | f | 3.6 | |
| 1344 | Call cord | | | 0.81 | |
| 1346 | Call giga | | | 3.26 | -9 |
| 1348 | Call stra | | | 1.45 | |
| 1446 | Bryu pseu | | | -1.84 | -12.05 |
| 1467 | Camp elod | | | -4.73 | -6.8 |
| 1471 | Camp stel | | | -3.45 | -8.51 |
| 1493 | Clim dend | | | -3.16 | -3.6 |
| 1496 | Crat comm | | | -2.22 | -1.2 |
| 1556 | Drep flui | | | 2.82 | |
| 1558 | Drep revo | | | -1.86 | -2.29 |
| 1691 | Plag affi | | | -3.78 | -7.65 |
| 1695 | Plag rost | | | -1.79 | -6.2 |
| 1700 | Rhiz pseu | | | -1.16 | -5.1 |
| 1701 | Rhiz punc | | | -0.49 | -5 |
| 1704 | Plag elat | | | -4 | -5.4 |
| 1745 | Phil calc | | | -1.05 | -2.65 |
| 1747 | Phil font | | | 0.43 | |
| 1832 | Raco lanu | | | -1.35 | |
| 1847 | Scor scor | | | -0.14 | 5.2 |
| 1860 | Spha capi | | | 0.5 | |
| 1862 | Spha cont | | | -0.85 | |
| 1863 | Spha cusp | | | 2.34 | -0.7 |
| 1864 | Spha fimb | | | -14.18 | |
| 1869 | Spha mage | | | 2.75 | |
| 1871 | Spha palu | | | -3.04 | -11.18 |
| 1872 | Spha papi | | | -0.42 | 0 |
| 1873 | Spha subn | | | -1.6 | -6.3 |
| 1876 | Spha recu | | | 0.39 | -3.6 |
| 1880 | Spha squa | | | -4.25 | |
| 1883 | Spha subs | | | 0.87 | -5.5 |
| NVC | Name | Ebg | Ind | Wtab UK | Wtab EE |

| | | | |
|---|---|---|---|
| 1884 | Spha tene | 1.67 | |
| 1885 | Spha tere | 0.88 | |
| 2122 | Pell endi | -3.17 | -0.2 |
| 2143 | Prei quad | -0.73 | |
| 2154 | Ricc mult | -2.14 | -8.2 |
| 2157 | Ricc cham | -0.02 | -0.3 |
| 2627 | Spha auri | 1.99 | -5.2 |

Additional species probably vulnerable to dehydration for which water-level data are not available include the following. Some of this are probably already extinct in East Anglian valley fens.

Campylium protensum
Cinclidium stygium
Drepanocladus exannulatus
Drepanocladus lycopodioides
Drepanoclaus sendteri
Drepanocladus vernicosus
Eriophorum gracile
Homalothecium nitens
Leiocolea rutheana
Liparis loeselii
Riccardia latifrons
Scirpus fluitans
Selinum carvifolia
Moerkia flotoviana