

CHAPTER 2. DORSET.

Summary.

The present status of *Potamogeton acutifolius* in Dorset centres on one ditch system and two branches of that same ditch system found running parallel to the main road from Wareham to the village of Stoborough. It is interesting to note that one of the branches of this ditch system (Site 4e) contained abundant growths of the hybrid species *Potamogeton x sudermanicus* (*P. acutifolius* x *P. berchtoldii*). The other parent *P. berchtoldii* was not recorded. The populations in Dorset of *Potamogeton acutifolius* are considered to be vulnerable to change, as any adverse change to the above ditch will cause further losses of this nationally rare species. The remaining ditch systems much closer to Redclife farm and those found close to the village of Ridge have all lost *Potamogeton acutifolius* due, possibly, to adverse water quality changes and, particularly at Ridge, the absence of management. At Ridge, the absence of management seems to be due to a shift in farming practice away from cattle grazing to one of silage production. The record for *Potamogeton acutifolius* at the Moors has also been lost due, it seems, to plant succession towards mire communities.

There were four surveys of the Dorset ditches recorded by the BSBI where 6 figure grid references were given (Appendix 1). These surveys were in 1988, 1989, 1996 and 1997. Overall there were 8 recorded BSBI sites for *Potamogeton acutifolius*. In the present survey only 2 sites, 25% of the sites, still contained *Potamogeton acutifolius*. These sites are all centred on the one ditch mentioned above. However 3 new sites were recorded along this ditch in entirely new 6 figure grid references. Thus the 75% reduction in sites for *Potamogeton acutifolius* in Dorset could be argued as being a 37.5% reduction. This however understates the decline of *Potamogeton acutifolius* all along the lower River Frome where the BSBI sites for *Potamogeton acutifolius* were once found. It stresses the need to positively conserve the present population and, if possible, positively manage the sites where it was once found.

REDCLIFFE FARM, STOBOROUGH.

Site 1. Status of *Potamogeton acutifolius*: ABSENT

Present Grid Reference: SY 92462 86648

BSBI Grid reference: SY 924 867 "best fit" for One 1997 BSBI record

Additional Records, same year: None

Duplicate Records, different years: None

1 km Square: None

10km Square: One 1979 BSBI record for the square SY 9—8--.

Ditch width: 3.0m Ditch depth: 1.2m

Water depth: 0.7m Freeboard: 0.3m

Sediment Depth: 0.2m Sediment type: Alluvium over peat.

pH 6.8. Conductivity 250 microsiemens

Open water: 2 Water Clarity. 3 (Scale 1-5)

Flora.



Site 1. Redcliffe Farm at SY 92462 86648, a ditch near the village of Stoborough.

Site 1 was the first site of a number of BSBI records, which were on the same ditch as it meandered its way towards the River Frome, running left to right in front of the church at Wareham (see Photograph). The aquatic flora was not diverse and was clearly affected by nutrient enrichment either coming from Stoborough village or simply from cattle defaecating in the ditch. Despite this pollution, the pH and conductivity suggested the water was of an ideal quality for the growth of *Potamogeton acutifolius*. The following aquatic species were found at Site 1 namely: *Lemna minor* (dom), *Lemna trisulca* (fr), *Equisetum fluviatile* (fr) and the algae *Mougeotia* spp.(occ) and *Spirogyra* spp.(occ). The emergent flora was co-dominated by *Sparganium erectum* and *Juncus effusus*. In association with these two species were the following: *Alisma plantago-aquatica* (fr), *Apium nodiflorum* (occ), *Lycopus europaeus* (occ), *Lythrum salicaria* (occ) and *Polygonum hydropiper* (fr). *Potamogeton acutifolius* was not found here at this point in the ditch.

Management. The ditch had been managed perhaps three years ago.

Shade. The site was partially shaded by the emergent plants on the west side (the left side) only.

Agricultural use. True grazing marsh used as grazing for cattle.

Reason(s) for absence. Nutrient enrichment and domination by *Lemna minor*.

Site 2. Status of *Potamogeton acutifolius*: ABSENT

Present Grid Reference: SY 92478 86712

BSBI Grid reference: SY 925 867 One 1989 BSBI records

Additional Records, same year: One

Duplicate Records, different years: None

1 km Square: One 1996 BSBI record for the square SY 92- 86-.

10km Square: One 1979 BSBI record for the square SY 9—8--.

Ditch width: 3.0m Ditch depth: 1.2m

Water depth: 0.7m Freeboard: 0.3m

Sediment Depth: 0.2m Sediment type: Alluvium over peat.

pH 6.8. Conductivity: 250 microsiemens

Open water: 0.5. Water Clarity. 2 (Scale 1-5)

Flora.



Site 2. Redcliffe Farm at SY 92478 86712, a ditch “midway” between Stoborough village and Wareham.

Site 2 is on the same ditch as Site 1. The following aquatic species were found at Site 2 namely: *Lemna minor* (dom), *Callitriche stagnalis* (fr), *Lemna trisulca* (fr) and *Equisetum fluviatile* (fr). The emergent flora was co-dominated by *Sparganium erectum* and *Juncus effusus*. In association with these two species were the following: *Alisma plantago-aquatica* (fr), *Apium nodiflorum* (occ), *Carex riparia* (occ), *Lycopus europaeus* (occ), *Lythrum salicaria* (occ), *Myosotis caepitosa* (occ), *Polygonum hydropiper* (fr), and *Rorippa amphibia* (occ). *Potamogeton acutifolius* was not found here at this point in the ditch.

Management. The ditch had been recently managed perhaps three years ago.

Shade. The site was partially shaded by the emergent plants on both the east and the west side (the left side).

Agricultural use. True grazing marsh used as grazing for cattle.

Reason(s) for absence. Nutrient enrichment and domination by *Lemna minor*.

Sites 3 and 4. Status of *Potamogeton acutifolius*: ABSENT and PRESENT

Present Grid Reference: SY 92523 86800 (925 868), ABSENT.

SY 92522 86842 (925 868), PRESENT (Site 4).

BSBI Grid reference: SY 925 868, One 1988 BSBI record.

Additional Records, same year: None

Duplicate Records, different years: None

1 km Square: One 1996 BSBI record for the square SY 92- 86-.

10km Square: One 1979 BSBI record for the square SY 9—8--.

Ditch width: 3.0m Ditch depth: 1.2m

Water depth: 0.7m Freeboard: 0.3m

Sediment Depth: 0.2m Sediment type: Alluvium over peat.

pH: Site 3: pH 6.8. Site 4: pH 6.8

Conductivity: Site 3, 250 microsiemens, Site4, 350 microsiemens.

Open water: 1 Water Clarity. 3 (Scale 1-5)

Flora.



Site 3. Redcliffe Farm at SY 92523 86800, a ditch close to Wareham.

Site 3 is on the same ditch as Site 1 and Site 2. The following aquatic species were found at Site 3 namely: *Ceratophyllum demersum* (co dom), *Lemna minor* (co dom),

Callitriche stagnalis (fr), *Lemna trisulca* (fr), *Equisetum fluviatile* (fr) and the algae *Mougeotia* spp.(occ), *Spirogyra* spp.(occ). The emergent flora was co-dominated by *Sparganium erectum* and *Juncus effusus*. In association with these two species were the following: *Alisma plantago-aquatica* (fr), *Apium nodiflorum* (occ), *Carex riparia* (occ), *Lycopus europaeus* (occ), *Lythrum salicaria* (occ), *Myosotis caespitosa* (occ), *Polygonum hydropiper* (fr), and *Rorippa amphibia* (occ). *Potamogeton acutifolius* was not found here at this point in the ditch.

Management. The ditch had been recently managed perhaps three years ago.

Shade. The site was partially shaded by the emergent plants on both the east and the west side (the left side).

Agricultural use. True grazing marsh used as grazing for cattle.

Reason(s) for absence. Nutrient enrichment and co-domination by *Lemna minor* and *Ceratophyllum demersum*.

Site 4. PRESENT for 1988 BSBI record SY 925 868 at SY 92522 86842, pH 6.8, Conductivity 350 microsiemens. This is some 50 metres before Site 4a SY 92556 86883 (the photograph illustrated below) which is on the same ditch as Sites 4, 3, 2 and 1. ***Potamogeton acutifolius* suddenly appears** at Site 4 but it was recorded only **occasionally here, and only where *Ceratophyllum demersum* was not locally dominant.** In addition the following aquatic species were found at Site 4 namely: *Lemna minor* (ab), *Lemna trisulca* (fr) *Spirodela polyrhiza* (occ) and the algae *Mougeotia* spp.(occ), *Spirogyra* spp.(occ). The emergent flora was co-dominated by *Sparganium erectum* and *Carex riparia*. In association with these two species were the following: *Alisma plantago-aquatica* (fr), *Juncus effusus* (fr), *Apium nodiflorum* (occ), *Juncus conglomeratus* (occ), *Lycopus europaeus* (occ), *Lychnis flos-cuculi* (r), *Myosotis caespitosa* (occ), *Polygonum hydropiper* (fr), and *Rorippa amphibia* (occ). *Potamogeton acutifolius* was found. The pH remained unchanged at 6.8 but there was a slight but probably important rise in conductivity from 250 to 350 microsiemens.

Sites 4a, b, c, d and e. Status of *Potamogeton acutifolius*: PRESENT

Present Grid Reference:	SY 92556 86883 (926 869) (Site 4a)
Additional New Record:	SY 92579 86901 (926 869) (Site 4b) NEW RECORD.
Additional New Record:	SY 92560 86935 (926 869) (Site 4c) NEW RECORD.
BSBI Grid reference:	SY 926 869 One 1988 BSBI record
Additional Records, same year:	None
Duplicate Records, different years:	None
1 km Square:	One 1996 BSBI record for the square SY 92- 86-.
10km Square:	One 1979 BSBI record for the square SY 9—8--.
NEW SITE:	SY 92537 86953 (Site 4d) (SY 925 870)
NEW SITE:	SY 92498 86943 (Site 4e) (SY 925 869)

Ditch width: 3.0m **Ditch depth:** 1.2m
Water depth: 0.7m **Freeboard:** 0.3m
Sediment Depth: 0.2m **Sediment type:** Alluvium over peat.

Site 4a, pH 7.0, Site 4b, c and d, pH 7.2 Site e, pH 6.8.

Conductivity: Site 4a, 450 microsiemens, Site 4b, 600 microsiemens, Site 4c and d, 650 microsiemens and Site 4e, 400 microsiemens.

Open water: 2

Water Clarity. 3 (Scale 1-5)

Flora.

Site 4a. SY 92556 86883, pH 7.0, Conductivity 450 microsiemens, is on the same ditch as Sites 1, 2, 3 and 4. *Potamogeton acutifolius* was recorded frequently but only where *Ceratophyllum demersum* was not locally dominant. In addition the following aquatic species were found at Site 4a namely: *Lemna minor* (ab), *Lemna trisulca* (fr) *Spirodela polyrhiza* (occ) and the algae *Mougeotia* spp.(occ), *Spirogyra* spp.(occ). The emergent flora was co-dominated by *Sparganium erectum* and *Carex riparia*. In association with these two species were the following: *Alisma plantago-aquatica* (fr), *Juncus effusus* (fr), *Apium nodiflorum* (occ), *Juncus conglomeratus* (occ), *Lycopus europaeus* (occ), *Lythrum salicaria* (occ), *Myosotis caespitosa* (occ), *Myosotis secunda* (occ) and *Polygonum hydropiper* (fr). The pH increased from 6.8 to 7.0 and there was a slight but probably important rise in conductivity from 350 to 450 microsiemens.



Site 4a. Redcliffe Farm at SY 92556 86883, a ditch close to Wareham

Site 4b. A NEW RECORD, SY 92579 86901 (SY 926 869), pH 7.2, Conductivity 600 microsiemens, this is on the same ditch as Site 1, 2, 3, 4 and 4a. Although on the same ditch, this is an ADDITIONAL NEW RECORD. *Potamogeton acutifolius* was recorded frequently AND *Ceratophyllum demersum* was clearly absent. In addition the following aquatic species were found at Site 4b namely: *Lemna minor* (ab), *Lemna trisulca* (fr) *Spirodela polyrhiza* (occ) and the algae *Mougeotia* spp.(occ), *Spirogyra* spp.(occ). The emergent flora was co-dominated by *Sparganium erectum* and *Carex riparia*. In association with these two species were the following: *Alisma plantago-aquatica* (fr), *Juncus effusus* (fr), *Apium nodiflorum* (occ), *Lycopus europaeus* (occ), *Lythrum salicaria* (occ), *Myosotis caespitosa* (occ), *Myosotis secunda* (occ) and *Polygonum hydropiper* (fr). The pH increased again from 7.0 to 7.2 and again there was a slight but probably important rise in conductivity from 450 to 600 microsiemens. Thus over the distance of approximately 70 metres the pH has risen from 6.8 to 7.2 and the conductivity has risen from 350 to 600 microsiemens and *Potamogeton acutifolius* has increased from being occasionally recorded to frequently recorded.

Site 4c. AN ADDITIONAL NEW RECORD SY 92560 86935 (SY 926 869), pH 7.2, Conductivity 650 microsiemens, although this has the same 6 figure grid reference as Site 4b. *Potamogeton acutifolius* was recorded abundantly BUT *Ceratophyllum demersum* was recorded frequently. For the first time *Elodea nuttallii* was recorded abundantly along this ditch. In addition the following aquatic species were found at Site 4c namely: *Callitriche stagnalis* (fr), *Lemna minor* (fr), *Lemna trisulca* (occ), *Spirodela polyrhiza* (occ) and the algae *Mougeotia spp.*(occ), *Spirogyra spp.*(occ). The emergent flora was co-dominated by *Sparganium erectum* and *Carex riparia*. In association with these two species were the following: *Alisma plantago-aquatica* (fr), *Juncus effusus* (fr), *Apium nodiflorum* (occ), *Lycopus europaeus* (occ), *Lythrum salicaria* (occ), *Myosotis caespitosa* (occ), *Myosotis secunda* (occ) and *Polygonum hydropiper* (fr). There was a slight but probably important rise in conductivity from 600 to 650 microsiemens but the pH remained the same at 7.2.

Site 4d, A NEW SITE, SY 92537 86953, pH 7.2, Conductivity 650 microsiemens. This is a new site for the BSBI records at SY 925 870. *Potamogeton acutifolius* was recorded abundantly *Ceratophyllum demersum* was absent. *Elodea nuttallii* was again recorded abundantly along this ditch. In addition the following aquatic species were found at Site 4d namely: *Callitriche stagnalis* (fr), *Lemna minor* (fr), *Lemna trisulca* (occ), *Spirodela polyrhiza* (occ) and the algae *Mougeotia spp.*(occ), *Spirogyra spp.*(occ). The emergent flora was co-dominated by *Sparganium erectum* and *Carex riparia*. In association with these two species were the following: *Juncus effusus* (fr), *Apium nodiflorum* (occ), *Lycopus europaeus* (occ), *Lythrum salicaria* (occ), *Mentha aquatica* (occ) and *Myosotis caespitosa* (occ). The pH at 7.2 and the conductivity at 650 microsiemens remained the same as Site 4c.

Site 4e, A NEW SITE, SY 92498 86943, pH 6.8 Conductivity 400 microsiemens. and new BSBI record at SY 925 869. *Potamogeton acutifolius* was recorded occasionally and interestingly had a smaller leaf width and length to that at previous sites. This on closer examination was recognised as the hybrid *Potamogeton x sudermanicus* (*P. acutifolius* x *P. berchtoldii*). *Ceratophyllum demersum* was absent. *Elodea nuttallii* also was recorded occasionally along this ditch. In addition the following aquatic species were found at Site 4c namely: *Callitriche stagnalis* (fr), *Lemna minor* (fr), *Lemna trisulca* (occ), *Spirodela polyrhiza* (occ) and the algae *Mougeotia spp.*(occ), *Spirogyra spp.*(occ). The emergent flora was co-dominated by *Sparganium erectum* and *Carex riparia*. In association with these two species were the following: *Juncus effusus* (occ), *Apium nodiflorum* (occ), *Lycopus europaeus* (occ), *Mentha aquatica* (occ), *Myosotis caespitosa* (occ) and *Myosotis secunda* (occ). This site had a frequent brown surface scum, which was identified as a diatomaceous bloom and the water was stained with iron ochre. There was a slight but probably important drop in pH from 7.2 to 6.8 and a conductivity fall from 650 to 400 microsiemens.

Management. The ditch had been recently managed at all the Sites namely 4, 4a, 4b, 4c, 4d and 4e possibly three years ago.

Shade. The site was partially shaded by the emergent plants on both the east and the west side (the left side in the photograph of Site 4a).

Agricultural use. True grazing marsh used as grazing for cattle.

Reasons for presence. Gradual reduction in the dominance of *Lemna minor* and *Ceratophyllum demersum* which may reflect subtle changes in the water quality.

Site 5. Status of *Potamogeton acutifolius*: ABSENT

Present Grid Reference:	SY 92918 86861 (929 868). "Best fit".
BSBI Grid reference:	SY 928 868, One 1988 BSBI record
Additional Records, same year:	None
Duplicate Records, different years:	None
1 km Square:	One 1996 BSBI record for the square SY 92- 86-.
10km Square:	One 1979 BSBI record for the square SY 9—8--.

Ditch width: 4.0m **Ditch depth:** 1.2m
Water depth: 0.7m **Freeboard:** 0.3m
Sediment Depth: 0.2m **Sediment type:** Alluvium over peat.
pH 6.5. **Conductivity:** 3000 microsiemens.
Open water: 0. **Water Clarity.** ? (Scale 1-5)

Flora.



Site 5. Redcliffe Farm at SY 92918 86861, south side of River Frome.

Site 5 at SY 92918 86861 is the only possible site for the BSBI record at SY 929 868. This grid reference lies to the left of the photograph approximately 30 metres into the grazing marsh. With management it would be interesting if the site would be suitable for *Potamogeton acutifolius*. The pH is acceptable but the conductivity at 3000 microsiemens could possibly be too high, due, probably, to a slight leak underneath the flood bank for the River Frome. This is the high ground to the right of the photograph. The site is dominated by *Phragmites australis* with abundant growths of both *Carex riparia* and *Juncus effusus*.

Management. The ditch had not been managed for probably ten years.

Shade. The site was totally shaded by the emergent plants.

Agricultural use. To the south lies true grazing marsh used as grazing for cattle. To the north is the River Frome.

Reason(s) for absence. Lack of management.

Site 6. Status of *Potamogeton acutifolius*: ABSENT

Present Grid Reference:	SY 92751 87000 (928 870) "Best fit".
BSBI Grid reference:	SY 927 870, Two 1988 BSBI records.
Additional Records, same year:	One
Duplicate Records, different years:	None
1 km Square:	One 1996 BSBI record for the square SY 92- 86-.
10km Square:	One 1979 BSBI record for the square SY 9—8--.

Ditch width: 3.0m. **Ditch depth:** 1.2m
Water depth: 0.7m. **Freeboard:** 0.3m
Sediment Depth: 0.2m. **Sediment type:** Alluvium over peat.
pH 7.5. Conductivity: 800 microsiemens
Open water: 0. **Water Clarity.** ? (Scale 1-5)

Flora.



Site 6. North West of Redcliffe Farm at SY 92751 87000, given in the Two BSBI records as "Redcliffe Farm" and "Wareham, south of River Frome".

The aquatic flora was dominated by *Lemna minor* and only one other species was in association with it namely *Lemna trisulca* (occ). The inner edge to the ditch contained the following species: *Alisma plantago aquatica* (occ), *Myosotis secunda* (occ), *Persicaria amphibia* (occ), *Rumex hydrolapathum* (occ) and *Mentha aquatica* (r). The ditch was edged by *Phragmites australis* and the occasional growth of *Juncus effusus*.

Management. The ditch had been managed perhaps three years ago, the abundance of cattle in this field and the obvious poached edges suggests that the cattle were causing some local enrichment.

Shade. The site was partially shaded by the emergent plants and totally shaded by *Lemna minor*.

Agricultural use. The site is surrounded by true grazing marsh used as grazing for cattle.

Reason(s) for absence. Nutrient enrichment and dominated by *Lemna minor*.

Site 7. Status of *Potamogeton acutifolius*: PRESENT

Present Grid Reference: SY 92629 87030* (SY 926 870) to SY 9259 86980 (SY 926 870) to SY 92564 86939*** (SY 926 870).**

BSBI Grid reference: None

Additional Records, same year: One

Duplicate Records, different years: None

1 km Square: One 1996 BSBI record for the square SY 92- 86-.

10km Square: One 1979 BSBI record for the square SY 9—8--.

***NEW SITE: SY 92629 87030 (SY 926 870).**

****ADDITIONAL NEW RECORD: SY 9259 86980 (SY 926 870).**

*****ADDITIONAL NEW RECORD: SY 9264 86939 (SY 926 870).**

Ditch width: 3.0m Ditch depth: 1.2m

Water depth: 0.9m. Freeboard: 0.2m

Sediment Depth: 0.1m. Sediment type: Alluvium over peat.

pH 7.5. Conductivity: 800 microsiemens.

Open water: 3. Water Clarity. 3 (Scale 1-5)

Flora.



Site 7. North West of Redcliffe Farm at SY 92629 87030. The grid reference for the two 1988 BSBI records is in a field between this site and Site 6.

The ditch in the above photograph is approximately 120 metres to the north west of the previous site, 6. The ditch at Site 7 had probably been cleansed two years ago, *Potamogeton acutifolius* was abundant along the length of this ditch and joined up with Site 4c (at the extreme end of the ditch in the photograph) where *Potamogeton acutifolius* had been recorded as growing abundantly. Thus the occurrence of *Potamogeton acutifolius* at Site 7 might be due to this connection with Site 4c but it is also a function of management. Of concern was the construction of a recent earth dam (the blockage of plants in the middle foreground of the photograph), which had no apparent pipe or culvert, thus isolating Site 7. Interestingly beyond the earth dam

at SY 9259 86980 (Site 7a) to the junction at Site 4c at SY 92560 86935 (**here recorded as SY 92564 86939 as the reading was the opposite side of the ditch to the reading for Site 4c**) was a ditch length of approximately 40 metres. For 10 metres of this length only, the algae *Mougetia spp.* and *Spirogyra spp.* were dominant, *Callitriche stagnalis* was abundant and *Potamogeton acutifolius* was absent. Over the next 30 metres, which eventually connected with Site 4c, *Potamogeton acutifolius* was present. In association with *Potamogeton acutifolius* at Site 7a were some occasional growths of *Lemna minor* and *Lemna trisulca* but this was the only supporting aquatic flora. The inner edge to the ditch contained the following species: *Alisma plantago aquatica* (occ), *Lythrum salicaria* (occ), *Myosotis secunda* (occ), *Persicaria amphibia* (occ), *Rumex hydrolapathum* (occ) and *Mentha aquatica* (r). The ditch was edged by occasional growths of *Phragmites australis*, *Carex riparia*, *Glyceria maxima*, *Juncus inflexus* and *Juncus effusus*.

Management. The ditch seemed to have been cut and managed but not dredged the previous year.

Shade. The site was marginally shaded by the emergent plants.

Agricultural use. The site is surrounded by true grazing marsh used as grazing for cattle.

Reason(s) for presence. Possible factors are water quality and at the correct point in the management cycle.

STOBOROUGH MARSH, BY THE VILLAGE OF RIDGE.

Site 8. Status of *Potamogeton acutifolius*: ABSENT

Present Grid Reference: SY 93680 87045 and SY 93700 87054.

BSBI Grid reference: Best fit for SY 937 870, One 1996 BSBI record named as Stoborough or Stoborough Meadows.

Additional Records, same year: None

Duplicate Records, different years: None

1 km Square: Three 1973 BSBI records for the square SY 93- 86-.

10km Square: One 1979 BSBI record for the square SY 9—8--.

Ditch width: 3.0m. Ditch depth: 1.1m

Water depth: 0.3m. Freeboard: 0.5m

Sediment Depth: 0.3m. Sediment type: Alluvium over peat.

pH 7.2. Conductivity: 800 microsiemens.

Open water: 0. Water Clarity. ? (Scale 1-5).

Flora.



Site 8. Stoborough Marsh at SY 93680 87045.

Stoborough Meadows or Marsh lies in the triangle of land between Redcliffe Farm, the village of Ridge, and Ridge Wharf. The whole of this area which also embraced the square SY 93- 86- was cut either for hay or silage. The ditches were either dry or had very little water in them presumably as there was no need to maintain them as wet fences. All the ditches were dominated by *Phragmites australis*.

Management. The ditch in the above photograph was typical of the whole of Stoborough Marsh. If managed *Potamogeton acutifolius* might return but the water levels also would need to be raised.

Shade. The site was totally shaded by *Phragmites australis*.

Agricultural use. The site was surrounded by grazing marsh but the land is no longer used as grazing for cattle. It is cut for hay or used for silage production.

Reason(s) for absence. Lack of management and water levels.

THE MOORS

Site 9. Status of *Potamogeton acutifolius*: ABSENT

Present Grid Reference: SY 95137 86507

BSBI Grid reference: Best fit for SY 951 866 One 1989 BSBI record.

Additional Records, same year: None

Duplicate Records, different years: None

1 km Square: None

10km Square: One 1979 BSBI record for the square SY 9—8--.

Ditch width: 4.0m **Ditch depth:** ?m

Water depth: 0.1m. **Freeboard:** 0.0m

Sediment Depth: ?m. **Sediment type:** Peat

pH 4.9. Conductivity: 110 microsiemens.

Open water: 0. **Water Clarity:** ? (Scale 1-5).

Flora.



Site 9. The Moors at SY 95137 86507.

Site 9 has succeeded to mire over the intervening 14 years. The grid reference for this site was in error and should have been SY 961 865 not 866. There were no other streams north of Site 9. The aquatic flora was dominated by *Potamogeton polygonifolius* and *Sphagnum recurvum*, with *Juncus bulbosus* recorded as abundant. The edge species were as follows: *Molinia caerulea* (ab), *Myrica gale* (ab), *Eriophorum vaginatum* (fr) and *Narthecium ossifragum* (occ).

Management. The ditch in the above photograph was an excellent example of an acid stream succeeding to mire. If managed *Potamogeton acutifolius* might return but this would temporarily destroy interesting and perhaps more important mire communities. At present it is considered that the site is too acid to support *Potamogeton acutifolius*.

Shade. The site was partially shaded by *Betula* spp.

Agricultural use. The site was surrounded by mire communities and is part of the heathland site at the Arne Peninsula.

Reason(s) for absence. Succession to mire communities.