

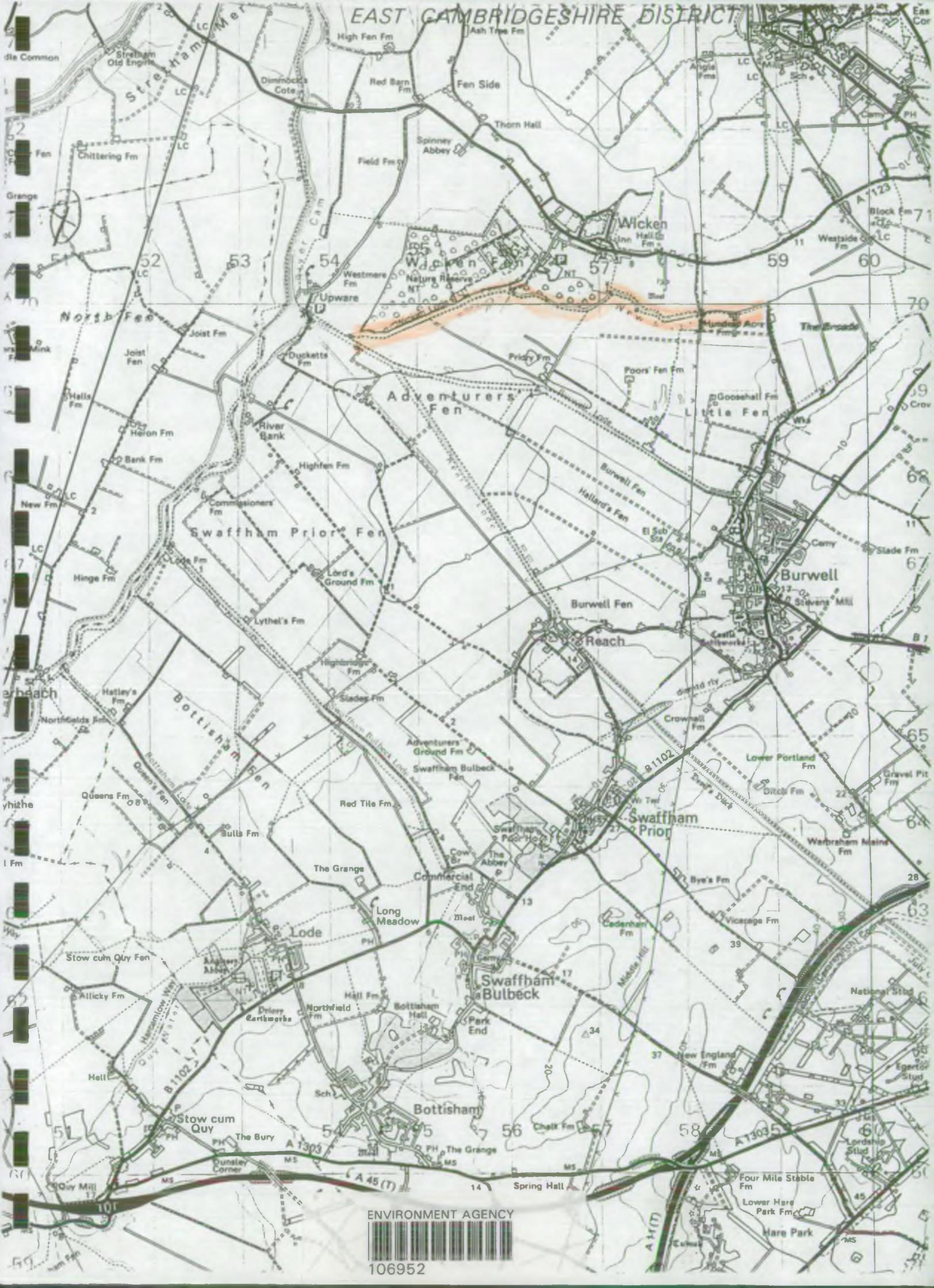
0091
NRA-ANGLIAN 272



NRA

*National Rivers Authority
Anglian Region*

EAST CAMBRIDGESHIRE DISTRICT



ENVIRONMENT AGENCY



106952

Management Suggestions CWIC 011-021

011 A rich and varied section especially in the upper half which has a reasonably diverse calcareous flora. At present the channel is over managed and it is surprising that the wide a range of marginal plants survive. Dumping of river spoil on the bank in the upstream half should be AVOIDED. If dredging is to continue, then spoil would be better dumped below here. Mowing of the banks was done in late July and if the cuttings could be removed from the upstream 250m then this would ensure that the area does not also become rank.

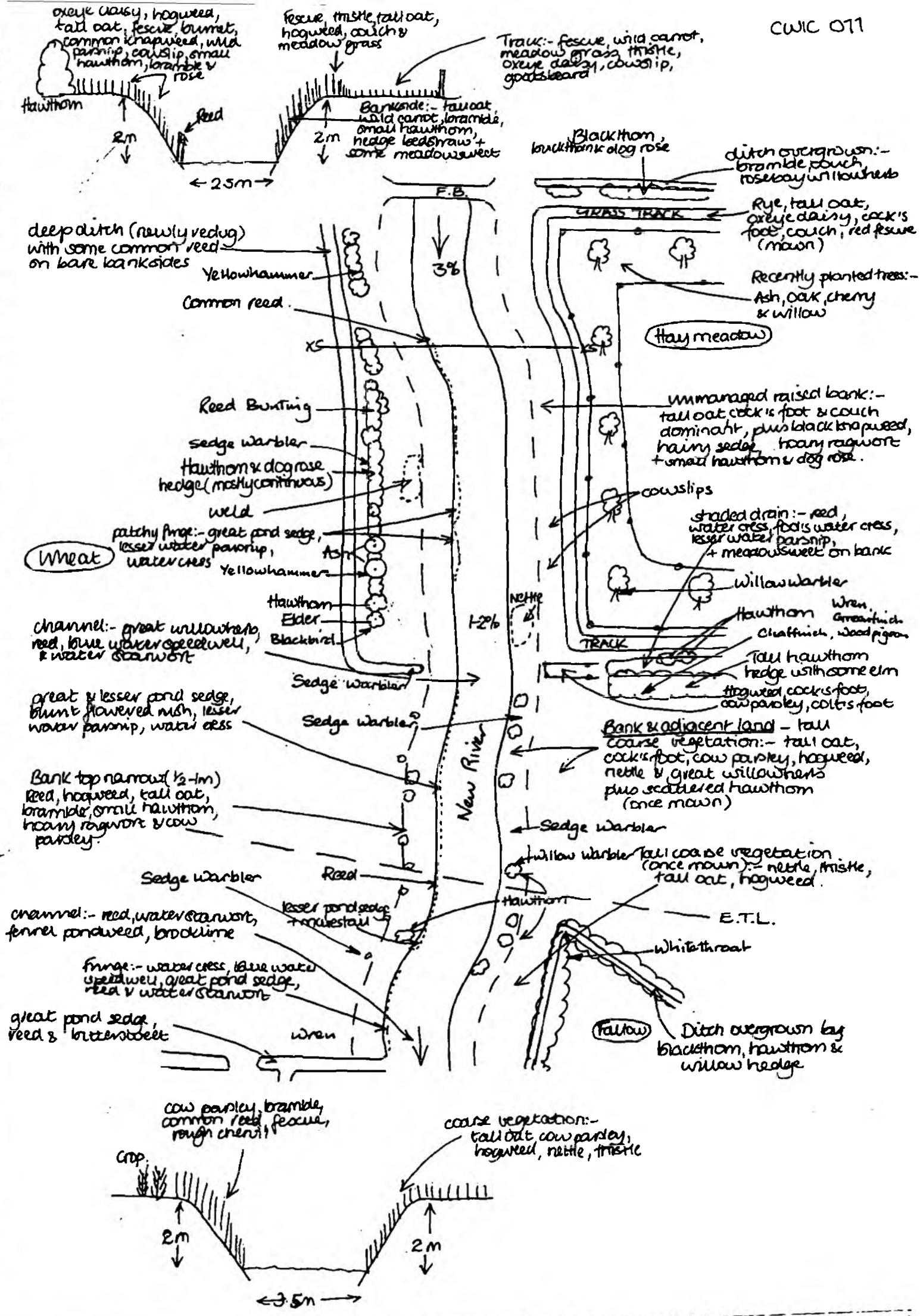
012 Right bank mown in late season - a slightly richer mixture on this side and no dredged spoil to be dumped here. No dredging of channel.

013-014 Dredging of sections of channel in rotation rather than the entire channel at once.

015 Allow upstream left bank to scrub up. On the right side, contrasting short grassland (in short supply along this river).

018 Less severe cutting of the left bank recommended.

020 Less cutting of fringe.



CWIC 011

Plant Communities

A gently curving lowland trapezoidal stream (slow/moderate flow) with a hay meadow bordered by a small mixed broadleaf plantation on the left, with a track and a drain perpendicular to the bank and then hedged arable fields. The right side is all wheat and rough herbage, flanked in part by a drain and hawthorn hedge. Both banks were mown in late summer.

The left side is dominated by tall grasses (false oat, cocksfoot, couch and smooth meadowgrass) with clumps of common knapweed, hairy sedge, wild carrot, wild parsnip and scattered small hawthorn and rose. The bank top and adjacent track were less coarse and more herb rich with false oat, red fescue, brown bent, wild carrot, ox-eye daisy, cowslips and goatsbeard - indicating a calcareous soil.

Below the side drain, the bank has taller coarser vegetation with false oat, cocksfoot, cow parsley, hogweed, nettle and great willowherb, as well as scattered hawthorn. There is no fringe.

The right bank at the upstream end is similarly calcareous in appearance with species such as wild parsnip, wood small reed, common knapweed, cowslip, salad burnet, along with a dominance of fescue and false oat. Scattered rose and bramble also occur. The vegetation becomes rougher downstream from the ditch with cow parsley, bramble, common reed, fescue, rough chervil.

The fringe is narrow with common reed, blunt-flowered rush, blue water speedwell, brooklime and wood small reed.

The shallow channel was cleared on the second visit but species noted include water starwort, fennel-leaved pondweed and water crowfoot giving 1-3% cover.

103 species recorded.

Breeding Birds

Ten species held a combined total of 17 territories. Bushes and trees on both banks held Whitethroat, Chaffinch, Greenfinch, Reed Bunting, Blackbird, Sedge Warbler, Woodpigeon, 2 Yellowhammer, 2 Willow Warbler and 2 Wren territories, with 4 further Sedge Warbler territories in tall herbs on the downstream banks and an abutting drain.

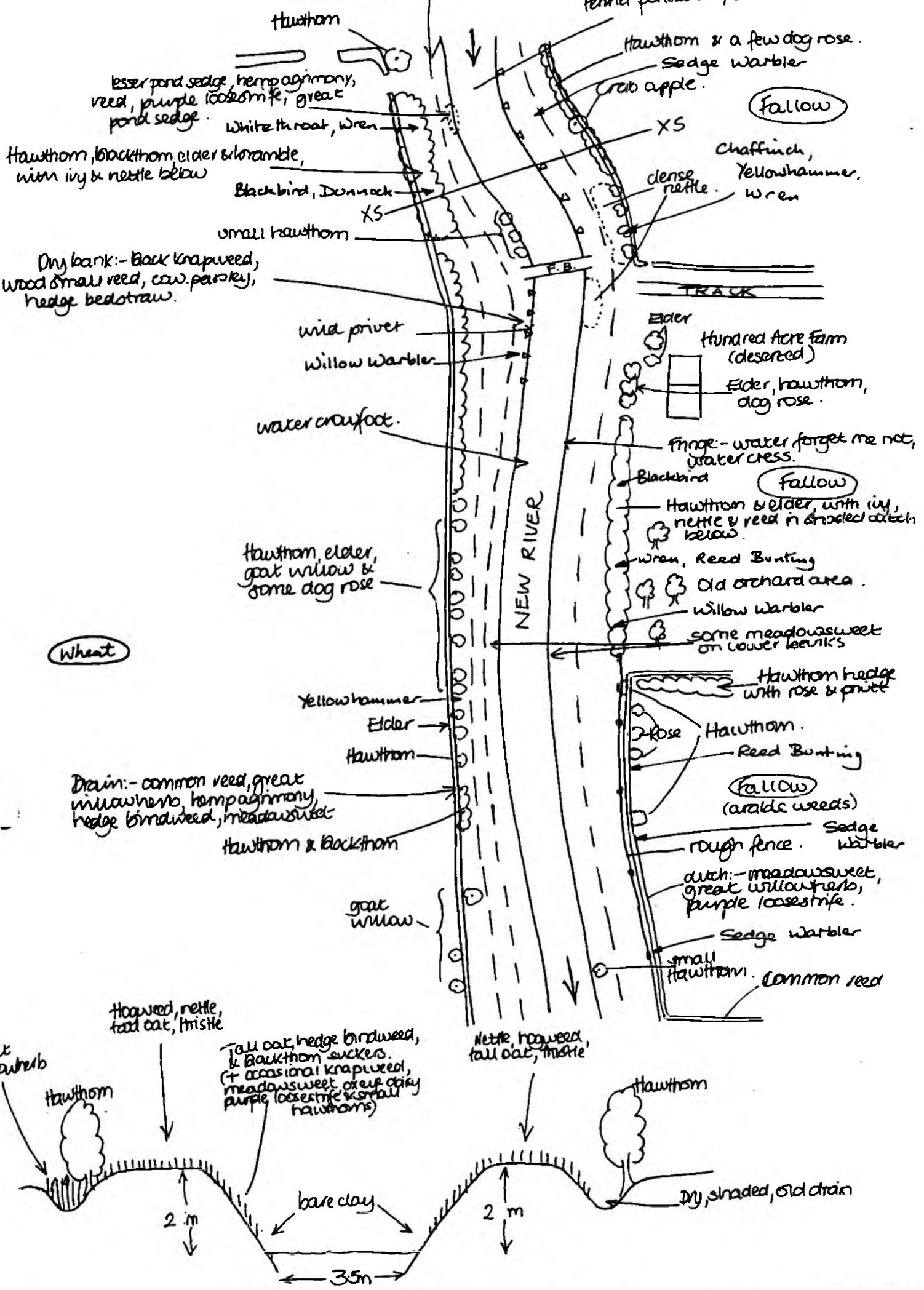
In addition, a Song Thrush was singing on June 8, when a Red-Legged Partridge was also seen, and a Reed Warbler sang on June 27.

Other

Small Tortoiseshell, Small White and Gatekeeper butterflies.

wild pansy, red fescue, dewberry, narrow leaf plantain, spear thistle

Fennel, pondweed, water starwort.



lesser pond sedge, hemp agrimony, reed, purple loosestrife, great pond sedge.

Hawthorn, blackthorn, elder & hawthorn, with ivy & nettle below

White throat, Wren

Blackbird, Dunnock

small hawthorn

Dry bank: - Black Knapweed, wood small reed, cow. parsley, hedge bedstraw.

wild privet

Willow Warbler

water crowfoot.

Hawthorn elder, goat willow & some dog rose

Wheat

Yellowhammer

Elder

Hawthorn

Drain: - common reed, great willow herb, hemp agrimony, hedge bindweed, meadowsweet

Hawthorn & Blackthorn

goat willow

Hoagweed, nettle, tall oat, thistle

Tall oat, hedge bindweed, & Blackthorn suckers. (+ occasional knapweed, meadowsweet or ivy or purple loosestrife & small hawthorns)

Nettle, hoagweed, tall oat, thistle

bare clay

Dry, shaded, old drain

35m

2m

2m

Hawthorn

Hawthorn & a few dog rose.

Sedge Warbler

Crab apple.

Fallow

XS

Chaffinch, Yellowhammer, Wren

dense nettle.

Elder

Hundred Acre Farm (deserted)

Elder, hawthorn, dog rose.

Fringe: - water forget me not, water cress.

Blackbird

Fallow

Hawthorn & elder, with ivy, nettle & reed in shaded areas below.

Wren, Reed Bunting

Old orchard area.

Willow Warbler

some meadowsweet on lower banks

Hawthorn hedge with rose & privet

2 Rose

Hawthorn.

Reed Bunting

Fallow

(arable weeds)

rough fence. Sedge Warbler

ditch: - meadowsweet, great willow herb, purple loosestrife.

Sedge Warbler

small Hawthorn.

Common reed

Red at willow herb

Hawthorn

Hawthorn

CWIC 012

Plant Communities

A gently curving lowland trapezoidal stream (with slow/moderate flow, over clay and gravel) flanked by arable land on both sides. Both banks are mown in high summer.

The left side has tall rank vegetation of nettle, hogweed, false oat and thistle with some meadowsweet on the lower bank. The soke drains have a lot of hawthorn, rose and elder scrub and hold meadowsweet, great willowherb and purple loosestrife. There is no fringe and bare clay was evident on the lower bank.

The right bank was a bit more species rich with hogweed, nettle, false oat and thistle on the bank top and false oat, hedge bindweed and blackthorn suckers on the bankside (at the top end). Occasional common knapweed, meadowsweet and ox-eye daisy, purple loosestrife and some hawthorns were also noted. On the lower bank more meadowsweet occurs, and at the top end more wild parsnip, red fescue, dewberry, ribwort plantain and spear thistle. A steep face held knapweed, wood small reed, hedge bedstraw and cow parsley. There is no fringe and bare clay is evident. One patch of lesser pond sedge, hemp agrimony, purple loosestrife and greater pond sedge occurs.

The soke drain has common reed, great willowherb, hemp agrimony, hedge bindweed and meadowsweet and has a mixed hedge of hawthorn, blackthorn, elder, bramble and goat willow.

Fennel-leaved pondweed, marestail, blue water speedwell, opposite-leaved pondweed, pink water speedwell, lesser water parsnip and water crowfoot were all noted on the first visit, before dredging.

67 species recorded.

Breeding Birds

Nine species held a combined total of 17 territories. The almost continuous hedge on both banks supported territories of Whitethroat, Dunnock, Chaffinch, 2 Blackbirds, 2 Yellowhammers, 2 Willow Warblers and 3 Wrens, with 2 Reed Bunting and 3 Sedge Warbler territories in tall herbage and scattered scrub on the left bank and soke drain.

In addition a Song Thrush and Robin were singing on June 8 and 2 Moorhens, a Magpie and a family of Blue Tits were seen on June 27.

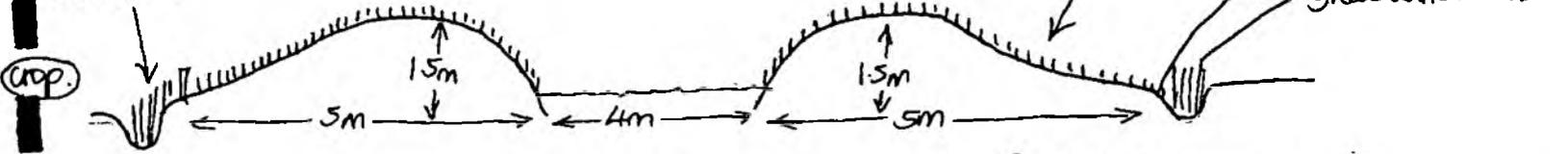
great willowherb, nettle, tall oat, meadowsweet, thistle, reed

mown bank: - cow parsley, tall oat, couch, nettle, thistle

mown bank: - cow parsley, tall oat, cock's foot, nettle, thistle

sterile brome, tall oat, escaped rape

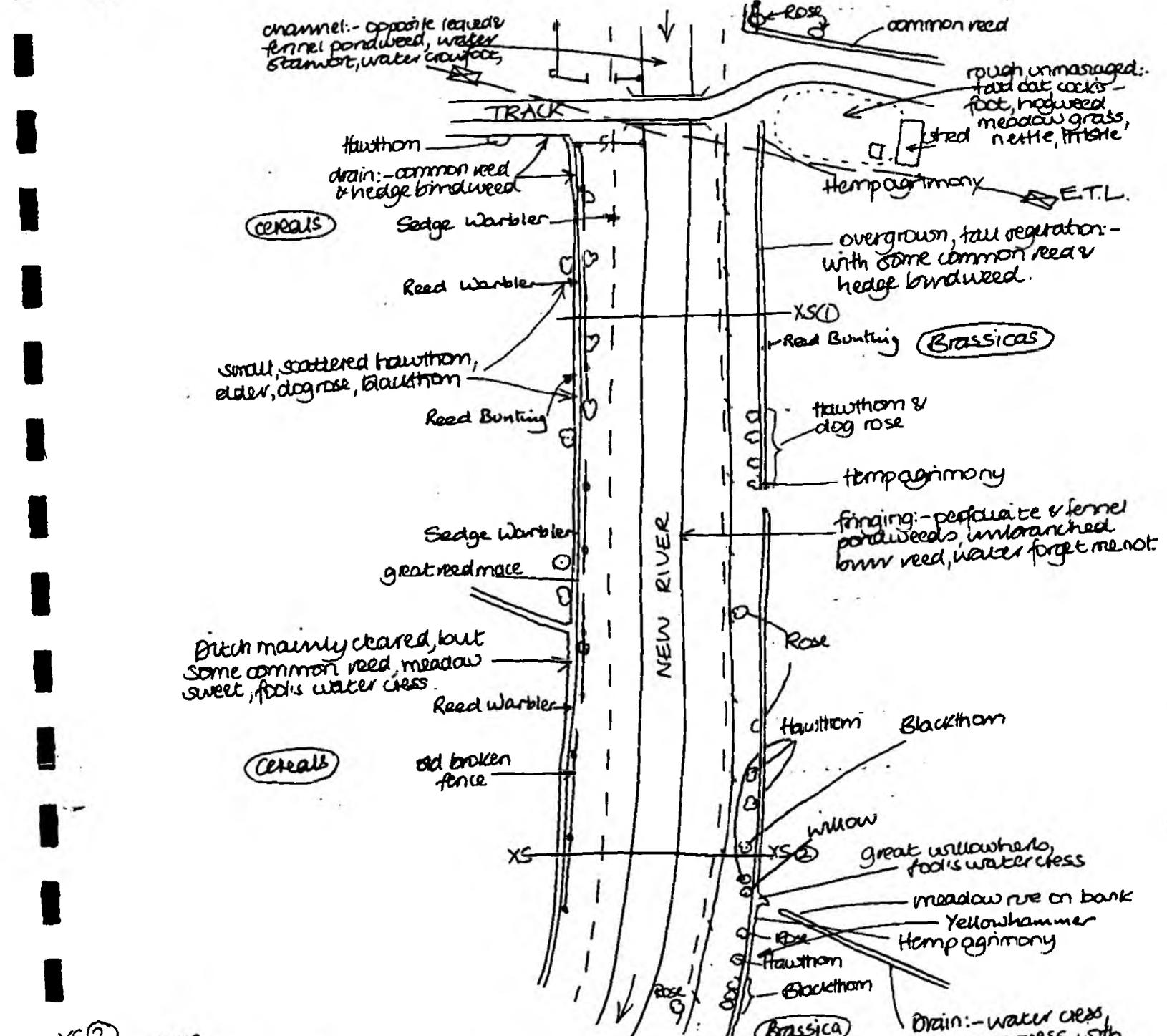
hemp agrimony on bank, dry ditch: - reed, meadowsweet, great willowherb



channel: - opposite reeds, fenel pondweed, water crowfoot, stamort, water crowfoot

rose, common reed

rough unmanaged: - tall oat, cock's foot, hedgeweed, meadow grass, nettle, thistle



pitch mainly cleared, but some common reed, meadow sweet, foot's water cress

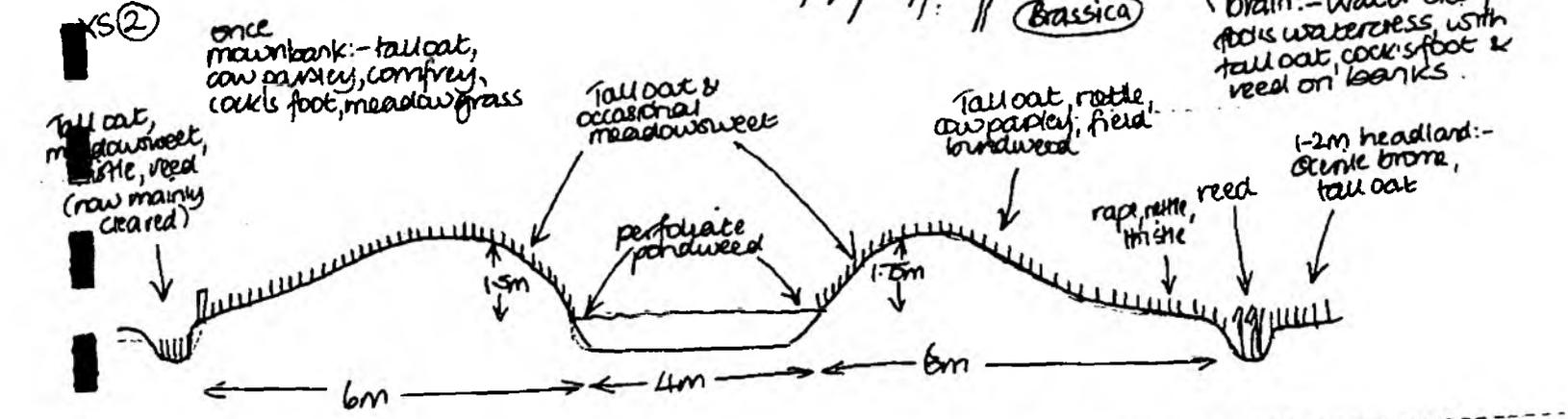
once mown bank: - tall oat, cow parsley, cornfrey, cock's foot, meadow grass

tall oat & occasional meadowsweet

tall oat, nettle, cow parsley, field bindweed

Drain: - water cress, foot's water cress with tall oat, cock's foot & reed on banks

1-2m headland: - sterile brome, tall oat



CWIC 013

Plant Communities

A nearly straight floodbanked lowland section, flanked on the left by brassicas, and on the right by cereals.

The left bank is dominated by rank false oat, nettle, cow parsley and field bindweed with more rape, nettle and thistle on the bank side and more false oat and meadowsweet on the front. A couple of roses occur on the bank and the adjacent soke drain has scattered hawthorn, rose, willow and blackthorn. Hemp agrimony, fool's watercress and great willowherb are also in the ditch. There was only a very little fringing great fen sedge and water forget-me-not.

The right bank is dominated by false oat, cow parsley, comfrey, cocksfoot and rough meadowgrass, the front side with more false oat and meadowgrass. A few hawthorn, rose, elder and blackthorn dot the adjacent soke drain. There is no fringe.

The channel has a varied flora with fennel-leaved, perfoliate and opposite-leaved pondweeds, stonewort, water starwort, unbranched bur-reed and fan-leaved water crowfoot, prior to dredging.

67 species recorded.

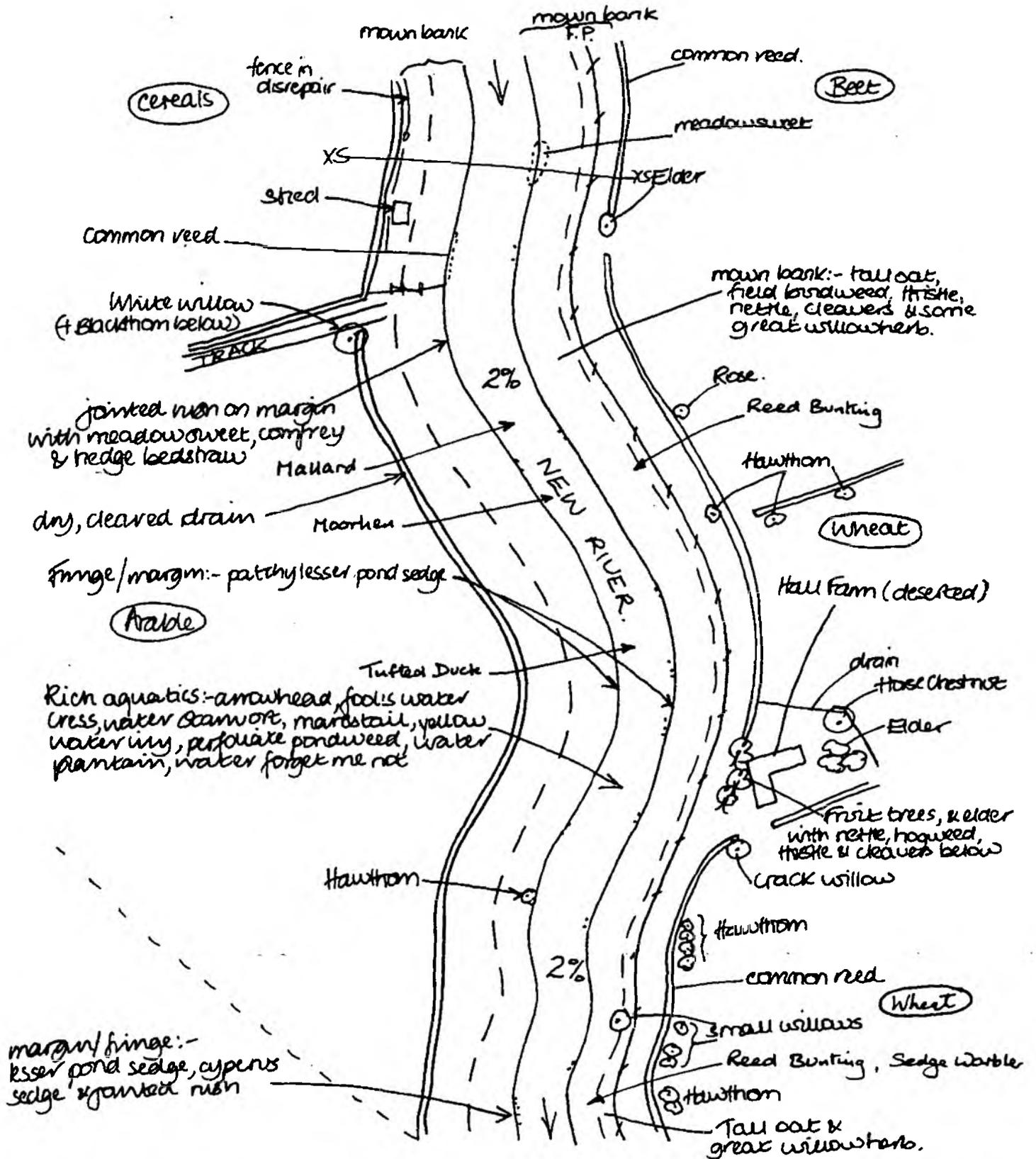
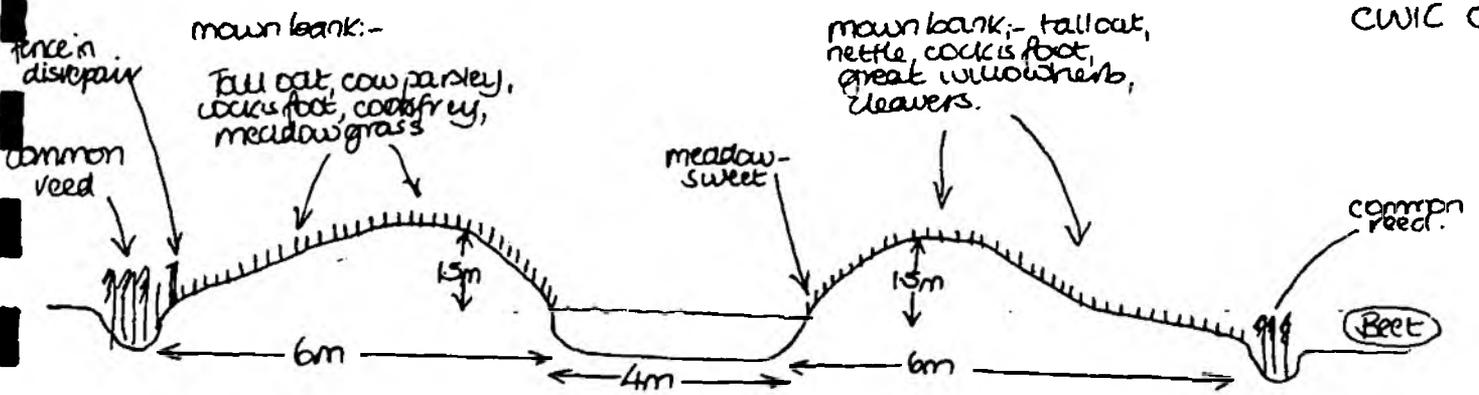
Breeding Birds

Four species held a combined total of seven territories. A Yellowhammer held territory in left bank downstream scrub, extending into CWIC 014, and 2 territories each of Reed Bunting, Reed Warbler and Sedge Warbler used the soke drains behind both banks.

In addition, a Blackbird was seen on April 23, a Moorhen on June 8 and a female Cuckoo on June 27.

Other

Small White butterfly.



CWIC 014

Plant Communities

A gently curving river section with low floodbanks sloping gently back to soke drains with beet and wheat on the left and cereals on the right.

The left bank is dominated by false oat, nettle, cocksfoot, great willowherb and cleavers, with one small willow. More meadowsweet occurs on the lower bankside and the adjacent soke drain has scattered hawthorn and rose scrub. A patchy fringe of lesser pond sedge occurs along both margins.

The right bank is dominated by false oat, cow parsley, cocksfoot, comfrey and rough stalked meadowgrass. One large white willow with some blackthorn occurs on the cleared soke drain. One hawthorn occurs riverside and there is a patch of common reed along with lesser pond sedge. Some cyperus sedge and jointed rush also occur.

The channel is rich in aquatics, on the first visit arrowhead, fool's watercress, water starwort, marestail, yellow water lily, water forget-me-not, water plantain and curled, Nuttall's, fennel-leaved and perfoliate pondweeds occurred. This was later dredged.

60 species recorded.

Breeding Birds

Five species held a combined total of six territories. Tall grass and herbs on the right bank held Sedge Warbler and 2 Reed Bunting territories, and those of Mallard, Moorhen and Tufted Duck were centred on the channel.

In addition, a Kingfisher flew downstream on June 8 and on June 27 family parties of Mute Swans and Chaffinches were present.

XS ②

Wet Wood
Birch, willow
bramble elder

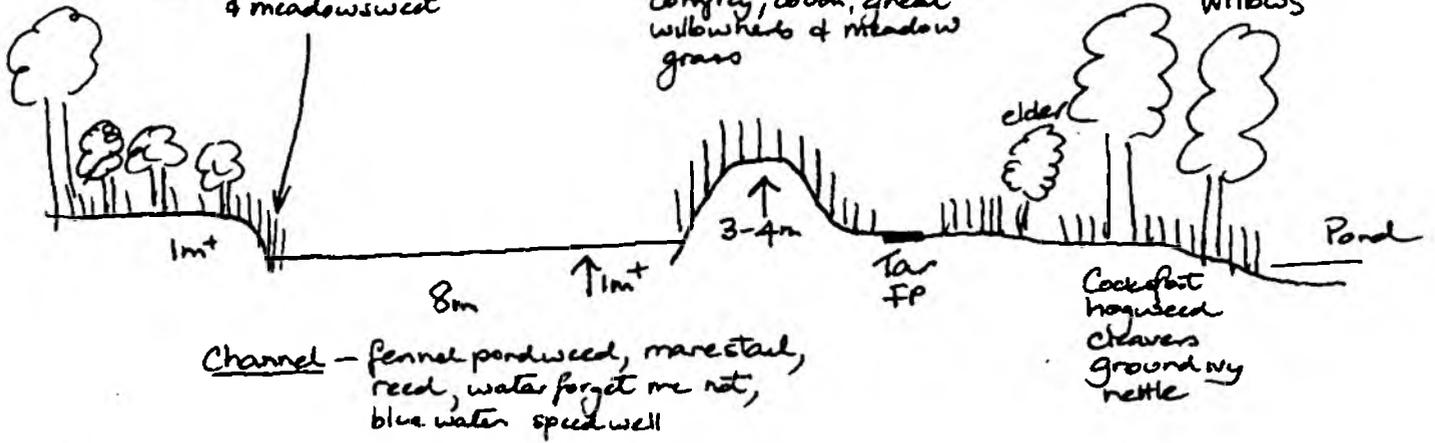
Bank - great willow herb,
cleavers, comfrey, reed
& meadowsweet

Bank - tall rank
cleavers, tall oats, hogweed,
nettle, reed, canary grass,
comfrey, couch, great
willow herb & meadow
grass

Willows

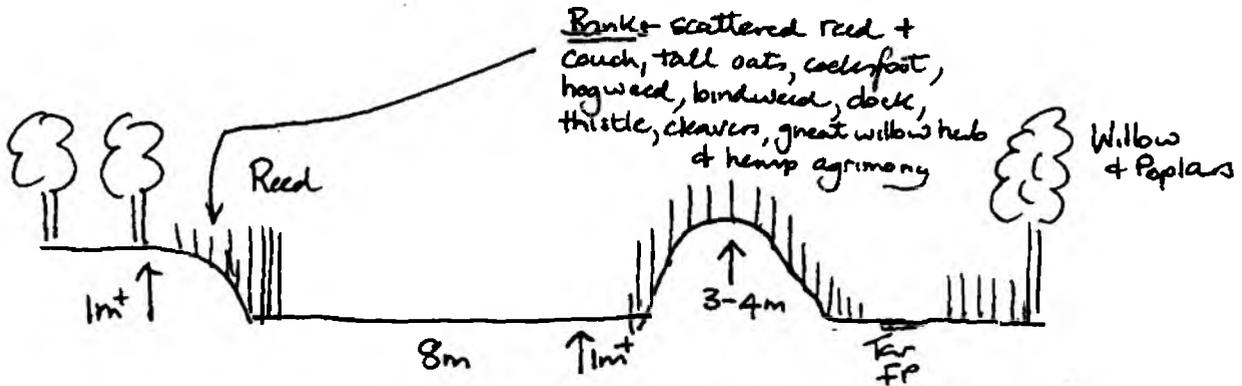
elder

Pond



Bank - scattered reed +
couch, tall oats, cockfoot,
hogweed, bindweed, dock,
thistle, cleavers, great willow herb
& hemp agrimony

Willow
& Poplars



Channel - Arrowhead, shining pondweed, river water dropwort
& Common reed.

CWIC 015

Plant Communities

A gently meandering, slow flowing, lowland, clay channel which is largely floodbanked. Wheat abuts the left side along with an overgrown mixed broadleaf copse midsection. The right side abuts wheat separated by a narrow grazing strip, and below the footpath is woodland of Wicken Fen Nature Reserve.

The left bank is dominated by rank herbs and grasses at the upstream end - false oat mainly, with cocksfoot, nettle, thistle, rape, hogweed and meadow grass. A few hawthorns, blackthorn, privet and willow dot the dry soke drain. The fringe is negligible with a little pond sedge and some meadowsweet.

Below the footbridge, the bank continues much as before with more herbaceous plants: comfrey, great willowherb, couch, some reed and, notably, hemp agrimony. A tar footpath follows the base of the bank. A little reed fringe occurs along the river edge.

The right bank is very similar to the left above the footbridge, and has one bankside hawthorn. Below the bridge, the floodbank discontinues and is dominated by tall marshy herbs and grasses - great willowherb, cleavers, comfrey, reed and meadowsweet with some coarse and less interesting species in places. A few hawthorns and willows occur along the bank. The fringe is sporadic and above the bridge is comprised of a few narrow beds of wood small reed and cyperus sedge as well as some reed and pond sedges above the drain inlet, which has reed sweet grass and fool's watercress. Below here, is patchy reed with some great willowherb and hemp agrimony.

The drain at the upstream end has purple loosestrife, meadowsweet and branched bur-reed, elsewhere the drains are of little interest.

The channel is very rich with a thick vegetation cover of 60-100%, comprising shining, curled, Nuttall's, fennel-leaved and perfoliate pondweeds, arrowhead, unbranched bur-reed, yellow water lily, mare's tail, water starwort and lesser amounts of blue water speedwell, fool's watercress, water mint, water forget-me-not and notably, river water crowfoot.

A rich and varied section abutting Wicken Fen Nature Reserve.
110 species recorded.

Breeding Birds

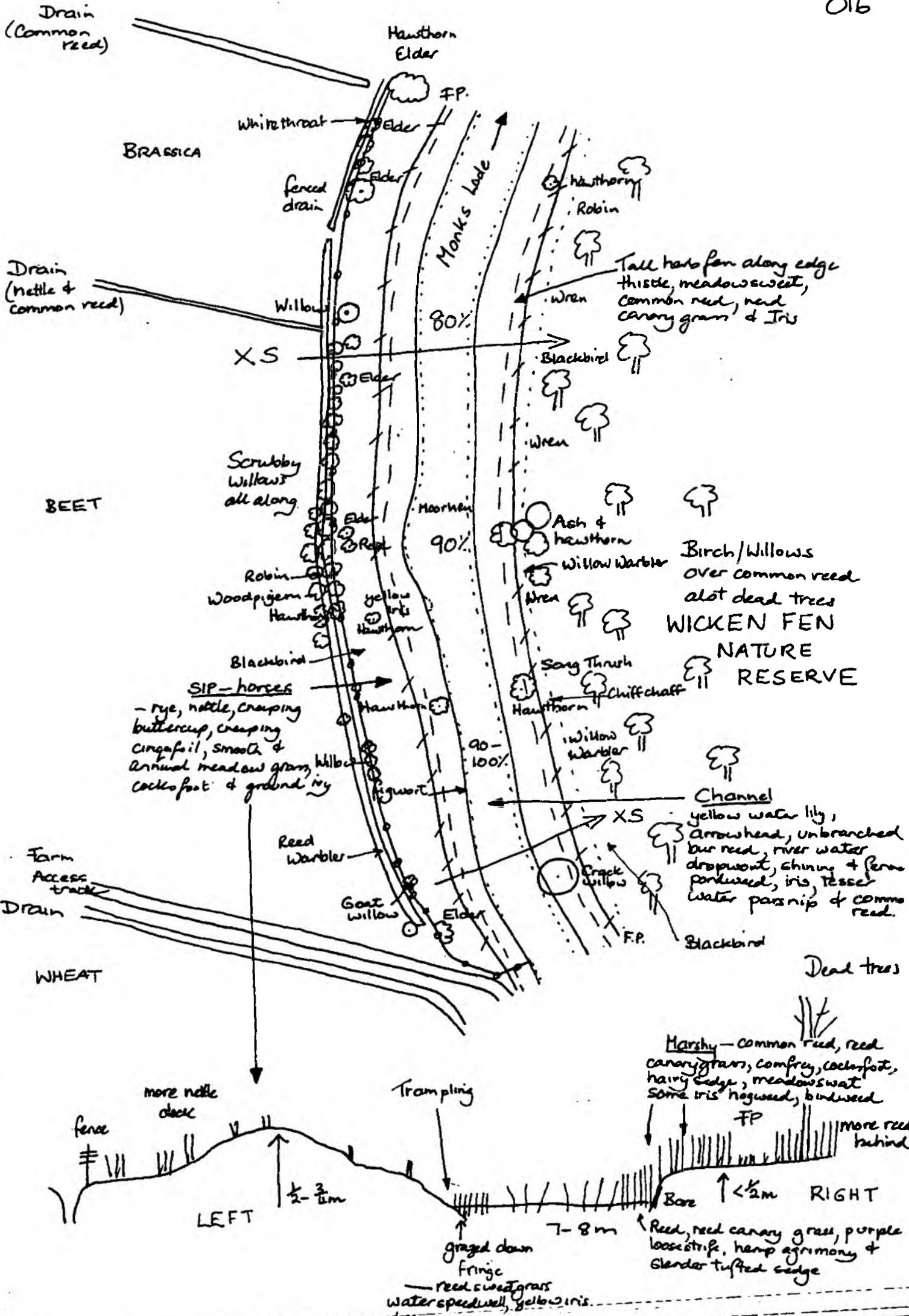
Seventeen species held a combined total of 27 territories. Tall grass and herbs on both banks in the upstream half held 2 Sedge Warbler territories, with a Moorhen territory centred on the channel fringe. Below the footbridge, woodland on both banks

supported Blue Tit, Chiffchaff, Collared Dove, Dunnock, Sedge Warbler, Great Tit, Greenfinch, Robin, Song Thrush, Whitethroat, Woodpigeon, Yellowhammer, 2 Blackbird, 2 Blackcap, 2 Chaffinch and 6 Wren territories within the river corridor.

In addition, a Willow Warbler was singing and a Snipe was seen on April 23, a Reed Warbler sang and a pair of Goldfinches displayed on June 8 and on June 27 a Coot, Linnet and a pair of Bullfinches were seen.

Other

Red Admiral and Speckled Wood butterflies.
Aeshna spp dragonfly.



Drain (Common reed)

Hawthorn Elder

BRASSICA

White-throat

FP.

fenced drain

Monks Lade

hawthorn Robin

Drain (nettle & common reed)

Willow

Tall herb fen along edge
thistle, meadowsweet,
common reed, reed
canary grass & Iris

X.S.

80%

Wren

Blackbird

BEET

Scrubby
Willows
all along

90%

Wren

Ash & hawthorn

Birch/Willows
over common reed
alot dead trees

Robin
Woodpigeon
Hawthorn
yellow iris
Hawthorn

90%

Wren

Song Thrush

WICKEN FEN
NATURE
RESERVE

SIP-horses
- rye, nettle, creeping
buttercup, creeping
cinqufoil, smooth &
annual meadow grass,
cockfoot & ground ivy

Hawthorn

90-100%

Chiffchaff

Willow Warbler

Channel

yellow water lily,
arrowhead, unbranched
bur reed, river water
dropwort, shining & fern
pondweed, iris, lesser
water parsnip & common
reed.

Farm
Access
track

Reed Warbler

Crack Willow

Blackbird

Drain

Goat Willow

Elder

WHEAT

Dead trees

more nettle
dock

Trampling

Marshy - common reed, reed
canary grass, comfrey, cockfoot,
hairy sedge, meadowsweet
Some iris hogweed, bindweed

fence

1/2 - 3/4 m

FP

more reed
behind

LEFT

< 2m RIGHT

grazed down
fringe

7-8m

Reed, reed canary grass, purple
loosestrife, hemp agrimony &
slender tufted sedge

reed sweet grass
water speedwell, yellow iris.

CWIC 016

Plant Communities

A slowly flowing fenland channel with mixed arable on the left separated from the horse grazed semi-improved pasture along the riverside by a well scrubbed dry ditch (mostly willows and some elder and hawthorn). The right side is birch and willow over tall fen - mostly common reed - which is part of Wicken Fen Nature Reserve.

The left bank is pasture of short grazed perennial rye grass, false oat, cocksfoot, smooth and annual meadow grass, creeping cinquefoil, creeping buttercup, nettle, cocksfoot, ground ivy and docks. A few large elder, rose, willow and hawthorn dot the berm. The fringe area is trampled and grazed with patchy reed sweet grass, blue and pink water speedwells, water forget-me-not, some cyperus sedge and a large clump of yellow iris.

The right bank is tall fen with meadowsweet, hogweed, bindweed, common reed, comfrey, cocksfoot, reed canary grass and some yellow iris. This merges into the fringe which is largely reed canary grass and common reed with some hemp agrimony, purple loosestrife and slender tufted sedge. One large crack willow overhangs the bank and a few hawthorns dot the bank top.

The channel is very rich with yellow and white water lily, arrowhead, unbranched bur-reed, river water dropwort, shining, perfoliate, fennel-leaved, Nuttall's and Canadian pondweeds, lesser water parsnip, common reed, common duckweed and watercress, giving 80-100% cover.

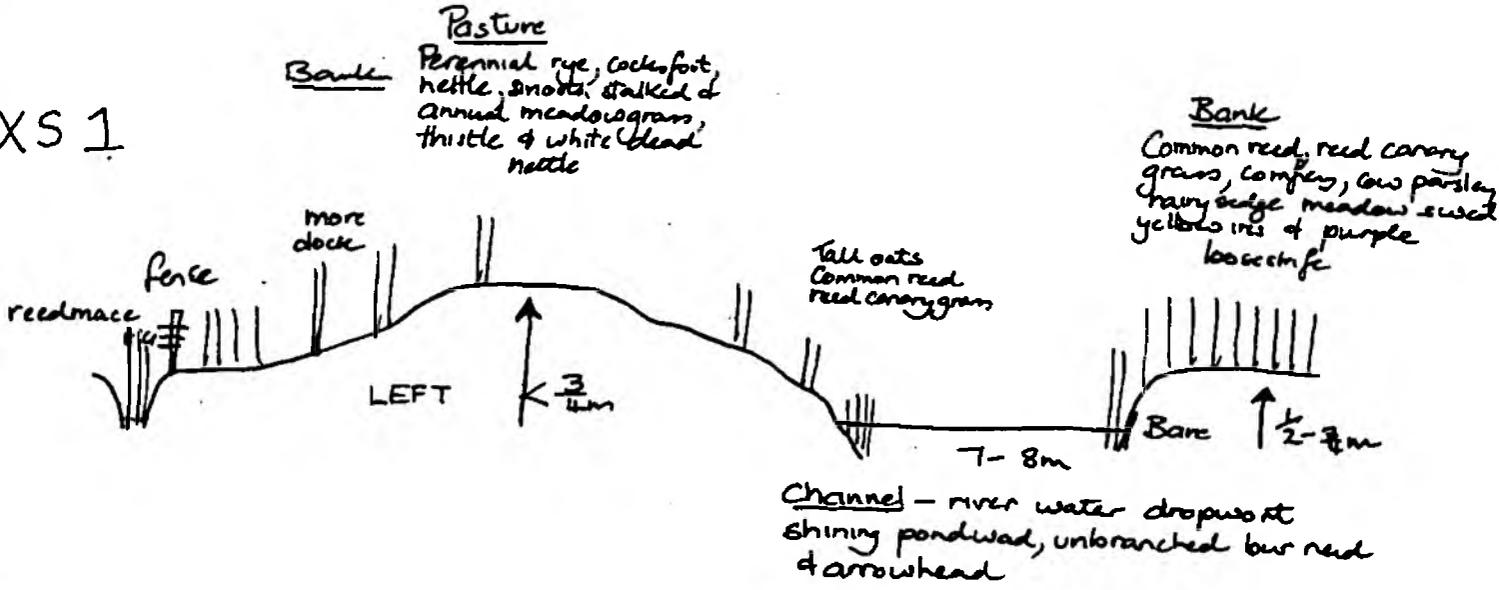
A rich section overall with short grassland and a shrubby hedge, Wicken Fen and the extremely rich river area.
79 species recorded.

Breeding Birds

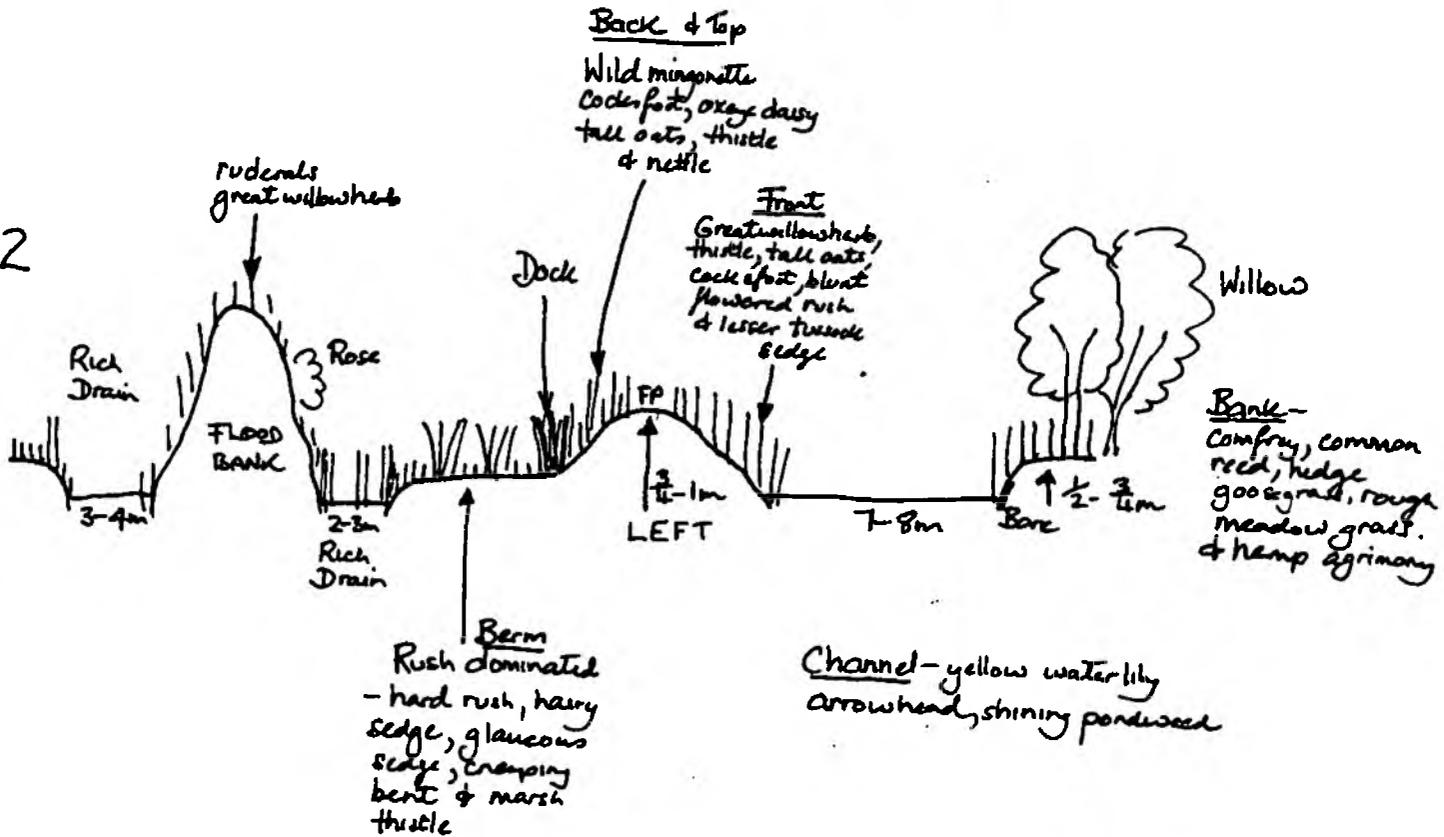
Ten species held a combined total of 16 territories. Left bank scrub and the wooded right bank held territories of Chiffchaff, Song Thrush, Whitethroat, Woodpigeon, 2 Robins, 2 Willow Warblers, 3 Blackbirds and 3 Wrens within the river corridor. A pair of Reed Warblers used the left bank soke drain and a Moorhen territory was centred on the channel.

In addition, a Jay and a Snipe were seen on April 23 and a Blue Tit and a Blackcap were singing on May 18.

XS 1



XS 2



CWIC 017

Plant Communities

A sluggish peaty fenland channel with wheat and then damp rush pasture (cattle) on the left separated from the river area firstly by a soke drain with elder scrub and then at the bottom end by a double drain with a high floodbank between them, which has scattered rose and hawthorns. The right side is Wicken Fen Nature Reserve with willow, and birch over tall fen (abundant common reed) and this extends to the river.

The left side is semi-improved pasture, horse grazed to the river. Above the fence and below here, the bank top/back is mainly cocksfoot and false oat with wild mignonette, ox-eye daisy, thistle and nettle. The bank berm is dominated by hard rush, with glaucous and hairy sedges, as well as creeping bent. A footpath runs along the top of the bank and the front is dominated by false oat and cocksfoot, with great willowherb, and lower down blunt-flowered rush and lesser tussock sedge. A very patchy fringe with some reed canary grass, rush, sedge and water forget-me-not are all grazed. Above the footbridge, the fringe is reed sweet grass, meadowsweet and lesser pond sedge, and later this was cut. The front side has hard rush, meadowsweet, fleabane and some purple loosestrife.

The right side is dominated by comfrey, common reed, cow parsley, reed canary grass, rough meadow grass, purple loosestrife, yellow iris and common reed with a few bankside willows. A considerable bare patch on the lower bank is evident. At the lower end the flora is less diverse with comfrey, reed, hedge bedstraw, rough meadowgrass and hemp agrimony. The varied fringe comprises common reed, reed canary grass, pond sedge, a considerable amount of hemp agrimony and patches of purple loosestrife.

The rich channel flora covered 30-100% of the channel (cut below the footbridge), comprises much arrowhead, unbranched bur-reed, yellow water lily, shining pondweed, and lesser amounts of river water dropwort, fool's watercress, water violet, bulbous rush, mare's tail, branched bur-reed, fan-leaved water crowfoot and common duckweed.

A varied river section with a rich channel flora and botanically interesting adjacent ditches.

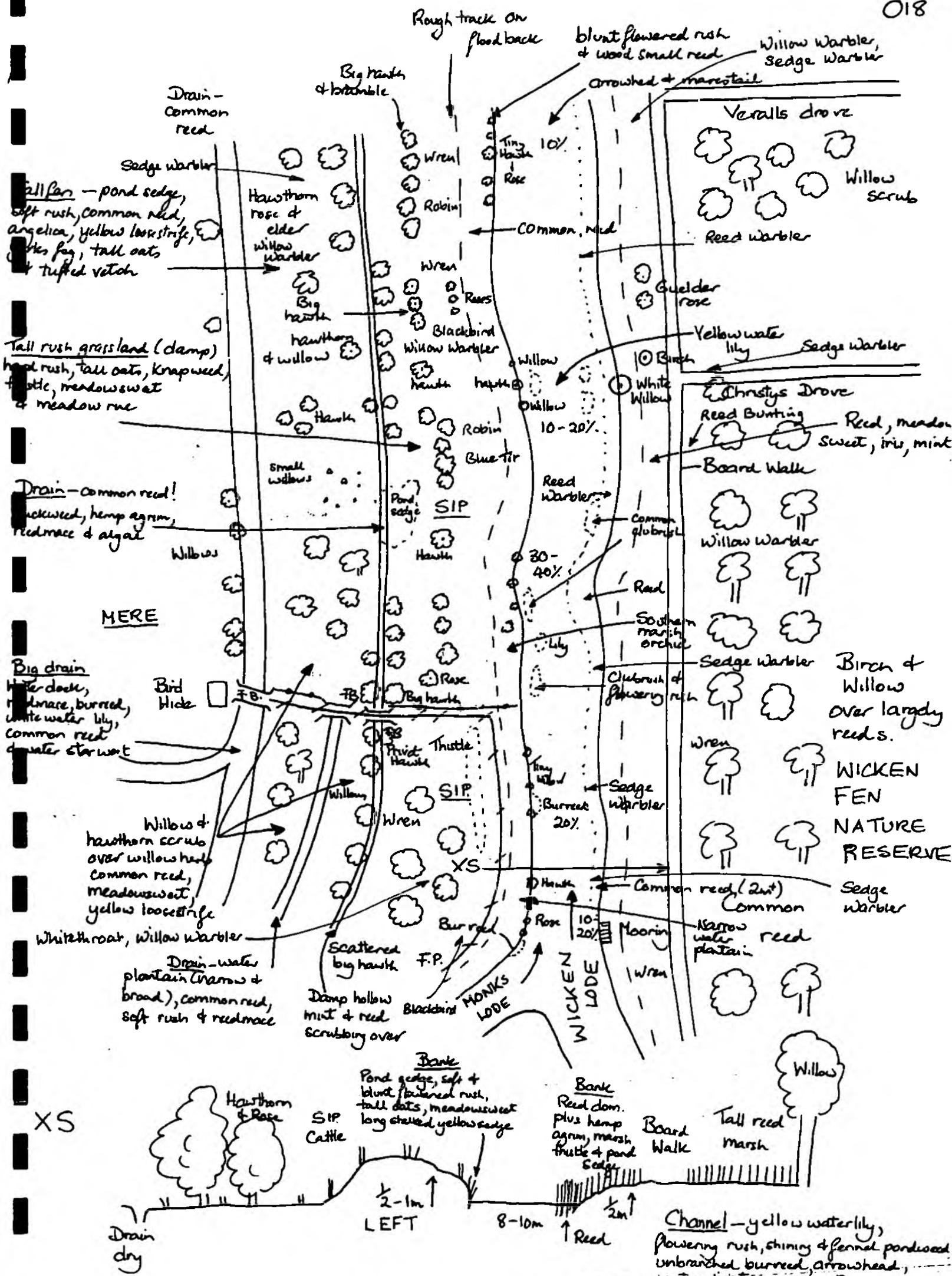
100 species recorded.

Breeding Birds

Eight species held a combined total of 16 territories. Willow and birch woodland on the right bank supported territories of Song Thrush, Woodpigeon, 2 Sedge Warblers, 2 Willow Warblers and 4 Wren

within the river corridor and the more open left bank held Blackbird, Yellowhammer, Pheasant and 3 further Sedge Warbler territories in scrub and tall herbage.

In addition, a Whitethroat sang on April 23, a pair of Bullfinches was seen on May 18 and a Coot and Barn Owl were seen on June 8.



HERE

XS

Drain dry

LEFT

WICKEN LODE

MONKS LODE

WICKEN FEN NATURE RESERVE

Channel - yellow water lily, flowering rush, shrimp & fennel pondweed, unbranched burreed, arrowhead,

CWIC 018

Plant Communities

A slow/moderate fenland drain flanked by mixed fenland and rush dominated marsh which has willow and hawthorn scrub, dissecting ditches, a bird hide and a mere on the left, behind cattle grazed semi-improved pasture adjacent to the river. The right side is largely common reed fen overgrown in places by willows and birch - all Wicken Fen Nature Reserve. A board walk runs along the top of the bank.

The left bank is pasture with perennial rye grass and plantain on the trampled bank top. The back side has a lot of creeping thistle, false oat, perennial rye grass, red and meadow fescues, cocksfoot, and hard rush. The front side has yarrow, false oat, cocksfoot, meadow fescue, perennial rye grassland some knapweed. Patches of wood small reed, blunt-flowered rush, long-stalked yellow sedge, meadowsweet and pond sedge occur on the lower bankside. A few small willows, rose and hawthorns dot the bank. A very patchy grazed fringe with a little reed, water mint and, notably, narrow-leaved water plantain and flowering rush, acute sedge and some bur-reed.

The right side is tall fen, mainly common reed with meadowsweet, watermint, yellow iris, pond sedge, hemp agrimony and marsh thistle. The fringe is an extension of the bank flora plus common clubrush and flowering rush.

The channel is rich and cut frequently throughout the season - estimated at 10-20% in June, with arrowhead, mareetail, water violet, unbranched bur-reed, bulbous rush, river water dropwort, shining, fennel-leaved, Canadian and perfoliate pondweeds, spiked water milfoil, white and yellow water lilies, water starwort, bulbous rush, fool's watercress and common duckweed.

Notable records include southern marsh orchids the left bank side (see map), the declining white water lily and the rich aquatic flora of adjacent fenland. An extremely rich and varied section with 138 species recorded.

Breeding Birds

Nine species held a combined total of 25 territories. Willow scrub on the left bank and woodland over common reed on the right bank supported territories of Blue Tit, Reed Bunting, Sedge Warbler, Whitethroat, 2 Blackbirds, 2 Robins, 5 Willow Warblers and 5 Wrens, with 2 Reed Warbler and a further 5 Sedge Warbler territories in the wide right bank reed fringe.

In addition, a Song Thrush and a pair of Bullfinches were seen on

May 18 and a Moorhen on July 15.

Other

Gatekeeper butterfly.
Blue damselfly.

CWIC 019

Plant Communities

A fenland drain with floodbank on the left leading back into a mosaic of damp fen communities dominated by rush, pond sedge and common reed. Lesser amounts of marsh woundwort, meadowsweet, yellow loosestrife, mint, marsh thistle, meadow rue and figwort occur. An old pond complex at the bottom end is scrubbing over. The 'mere' lies beyond. The right side has reed beds and willow scrub of Wicken Fen Nature Reserve.

The left bank has a grassy track along its top with perennial rye grass and plantain. The landward side is pasture (false oat, cocksfoot, thistle, meadow fescue etc.) with much rose and hawthorn scrub. The riverward side is also similarly grassed but is more diverse, with knapweed, meadowsweet, selfheal, hemp agrimony and scattered rose and hawthorn. The fringe is grazed down and is only patches of blunt-flowered rush, with one small bed also with common reed, great willowherb and common clubrush.

The right bank is largely common reed dominated with some meadowsweet and yellow iris. However, more variety exists at the downstream end with comfrey, great willowherb, Yorkshire fog, false oat, meadowsweet and acute sedge. Patches of hemp agrimony and purple loosestrife are also evident, leading into a fringe dominated by common reed with pond sedge, reed sweet grass, lesser water parsnip and fool's watercress.

The species rich channel has 10-30% cover (cutting in process in July) with unbranched bur-reed, white water lily, yellow water lily, mare's tail, arrowhead, bulbous rush, water violet, shining, perfoliate, Canadian and Nuttall's pondweeds, river water dropwort, common duckweed, flowering rush and stonewort combine to give 103 recorded species.

Breeding Birds

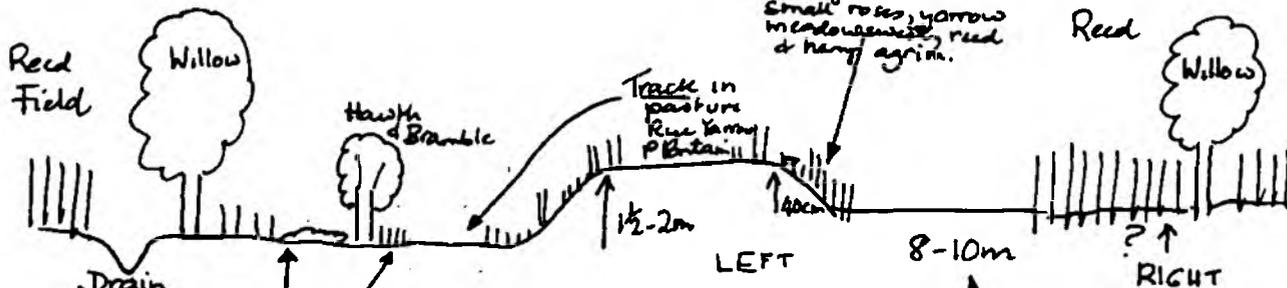
Ten species held a combined total of 26 territories. Willow scrub and reed fen on both banks, including the right bank reed fringe, held territories of Robin, Yellowhammer, Song Thrush, Blackcap, Chaffinch, Reed Warbler, 2 Blackbirds, 4 Willow Warblers, 6 Wrens and 8 Sedge Warblers.

In addition, a Chiffchaff sang on April 23, Dunnock, Long-tailed Tit, Mute Swan and Mallard were seen on May 18, a Whitethroat on June 27 and 2 Blue Tits and 2 Reed Buntings on July 15.

Other

Red Admiral butterfly.
Blue damselfly.

XS①



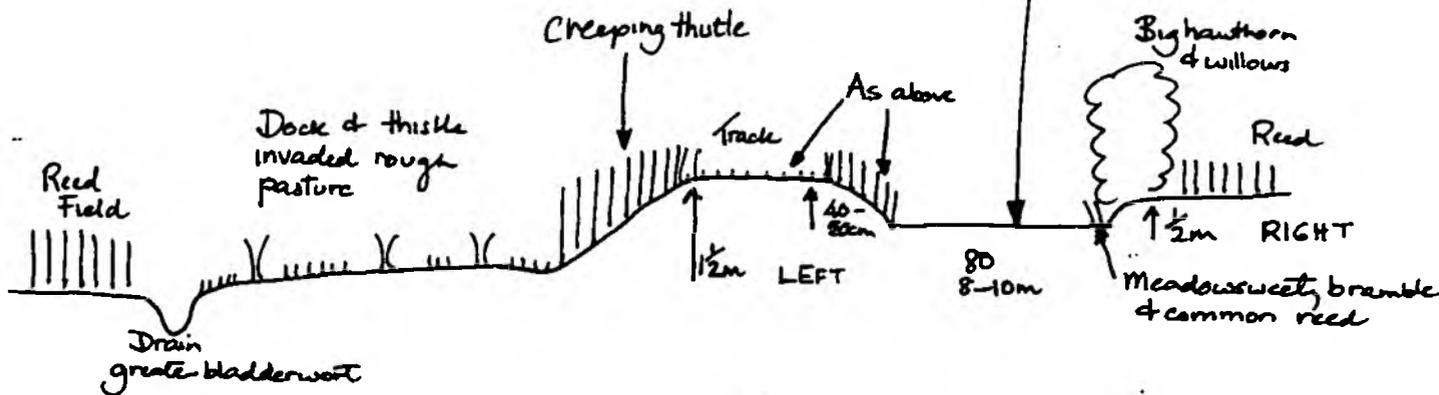
Front
Creeping thistle! selfheal
Oxeye daisy, meadows &
red fescue, Yorks fog,
blunt flowered rath
small roses, yarrow
meadowsweet, reed
& hairy agraria.

Pasture
Ryegrass, hard rush
tall oat, cocksfoot
Yorks fog, meadow
fescue

Backside
Creeping thistle! + yarrow
red fescue, ryegrass, meadow
grass, cocksfoot, creeping
buttercup, creeping cingfoil

River bulbous rush, arrowhead
Canadian, fennel & petiolate pondweed,
yellow water lily marshall

XS②



CWIC 020

Plant Communities

A gently curving fenland stream, floodbanked on the left and flowing through Wicken Fen Nature reserve with common reed beds on the left and beyond the soke drain and rough semi-improved pasture which has concentrations of mixed scrub (willow, elder, hawthorn, bramble and reed at either end). On the right side is willow, elder and birch over reed.

The left bank has a vehicle access along the top and back berm which is dominated by plantain, perennial rye grass, yarrow and creeping buttercup. The landward side has a lot of creeping thistle and lesser amounts of false oat, cocksfoot, smooth and rough-stalked meadow grass, Yorkshire fog, meadow and red fescue, creeping buttercup and creeping cinquefoil. The front side is similar in grass composition but has more interesting flowers with ox-eye daisy, selfheal, yarrow, small rose and hawthorn, meadowsweet, hemp agrimony and common reed. There is little fringe, and it is grazed/cut, with common clubrush, reed sweet grass, acute sedge, blunt-flowered rush, water mint, water forget-me-not, reed canary grass, bur-reed and notably, creeping jenny and a large clump of yellow iris.

The right side is all tall fen dominated by common reed with lesser amounts of hemp agrimony and reed canary grass above the soke drain (see XS 1). A few willows, rose, bramble and guelder rose dot the bank. Below the drain the tall adjacent scrub, mostly hawthorn overhanging the river in places and dominating the bank, allowing only patches of meadowsweet and common reed with some comfrey and purple loosestrife (see XS 2). The fringe is dominated by common reed and is discontinuous, with acute sedge, pond sedge and notably, narrow-leaved water plantain. The fringe was cut during the summer.

The channel vegetation was varied - yellow and white water lilies, arrowhead, Nuttall's, Canadian, shining, perfoliate, fennel-leaved pondweeds, mareetail, common duckweed, bulbous rush, unbranched bur-reed and water violet. Greater bladderwort was noted in the peaty soke drain and some of the damp grassland patches on the left berm were quite varied (see map).

113 species recorded.

Breeding Birds

Ten species held a combined total of 23 territories. Scrub, tall herbs and common reed on both banks supported territories of Reed Warbler, Turtle Dove, 2 pairs each of Blackbird, Blackcap, Blue Tit, Sedge Warbler, Willow Warbler and Woodpigeon, and 8 Wrens. A

Moorhen territory was centred on the channel.

In addition, a Pheasant, a Coot and a pair of Canada Geese were seen on May 18, when Collared Dove, Great Tit and Whitethroat were singing, a Dunnock sang on June 8 and a Reed Bunting on June 27.

Other

Peacock, Large White and Meadow Brown butterflies.
Blue damselfly.
Large Hawker dragonfly.

CWIC 021

Plant Communities

A winding peaty fenland stream flowing into Reach Lode with low floodbanks on the left and rough, damp sheep pasture with scattered hawthorn, willow scrub and some large white willow at the confluence. The right side is the western perimeter of Wicken Fen Nature Reserve with much willow/hawthorn scrub over tall fen - reed and great willowherb. The downstream end is arable with a wide soke drain above its perimeter and two large perpendicular drains with adjacent willows, poplars and a hawthorn hedge.

The left side is sheep grazed pasture with a lot of creeping thistle and lesser amounts of perennial rye grass, smooth meadow grass, long-leaved plantain, ragwort, false oat, cocksfoot, Yorkshire fog, yarrow etc. (see XS 1 for more details). There are scattered hawthorn, willow and rose along the bankside. The lower front side is trampled in places and has, in addition to the pasture species, has meadowsweet, blunt-flowered and hard rushes, great willowherb, water mint and amphibious bistort, which merge into a fragmented fringe which also has reed sweet grass, lesser water parsnip and branched bur-reed. There are two main blocks of fringe, one similar to the patchy fringe, but the other is more extensive (1-2½m wide) with much reed sweet grass, greater pond sedge, tubular water dropwort, watermint, gipsywort, iris patches, clumps of marsh marigold and thin bands of outer fringe comprises common clubrush.

The right side by the reserve is all fen (common reed, great willowherb and some meadowsweet) with a guelder rose, and a few overhanging hawthorn and willow. Below there, the bank is tall coarse vegetation - false oat, hogweed, cocksfoot and common reed with some large overhanging white willow by the footbridge. The fringe is largely common reed and both pond sedges. One patch of acute sedge and one of purple loosestrife occurs. The fringe was severely cut in places.

The channel was varied and had been cut with 10-20% cover, comprising shining, perfoliate, fennel-leaved, Canadian and Nuttall's pondweeds, unbranched bur-reed, arrowhead, yellow and white water lily (especially along the edges), river water dropwort and common duckweed, giving 104 recorded species.

Breeding Birds

Nine species held a combined total of 15 territories. Willow scrub on both banks held territories of Blackbird, Blackcap, Robin, Woodpigeon, 2 Chaffinches, 2 Willow Warblers, 2 Wrens and 3 Sedge Warblers, with a fourth Sedge Warbler territory in tall herbs at the confluence and a Moorhen territory centred on the channel.

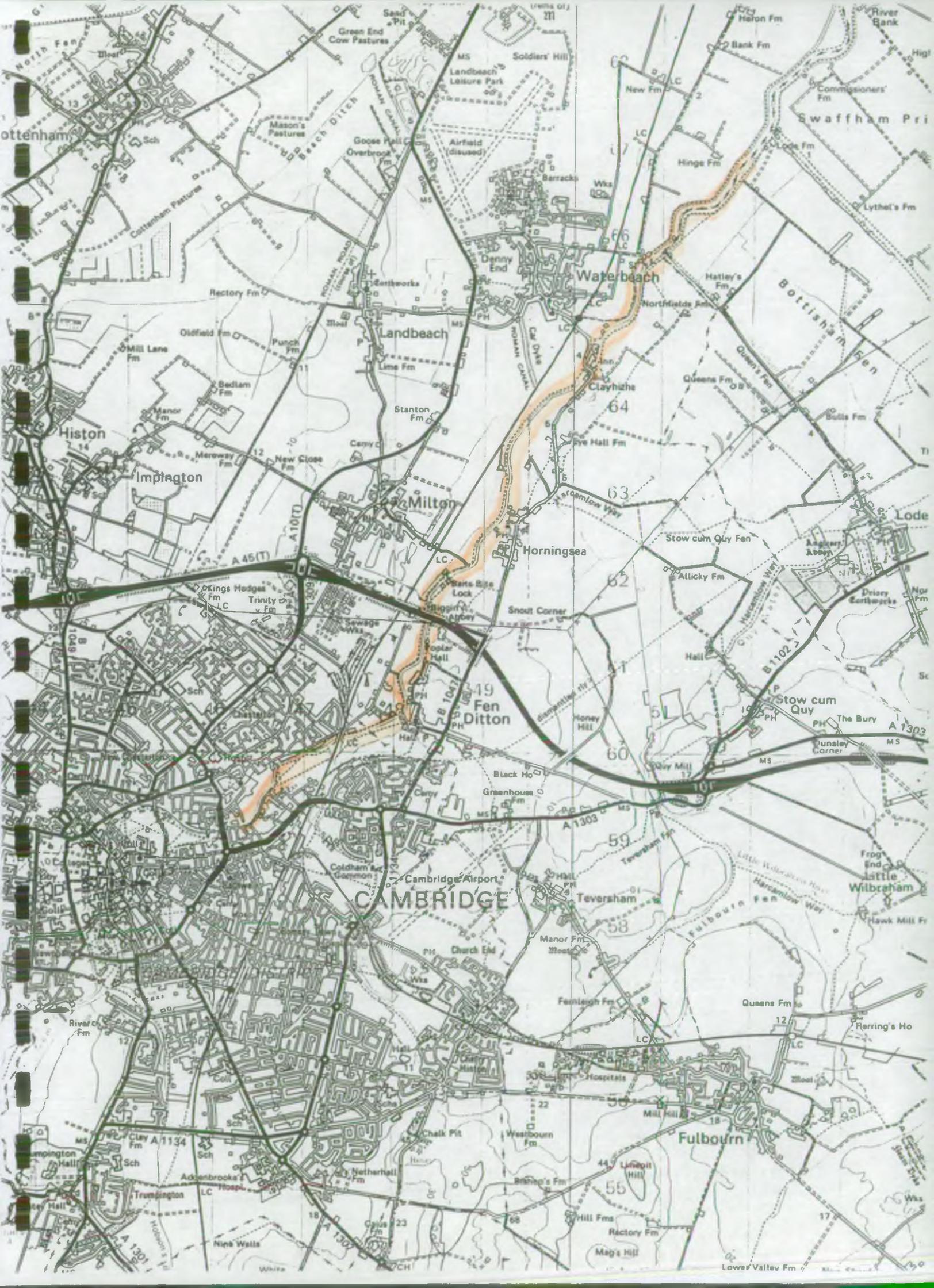
Other species recorded but not shown to hold territories included
Dunnock, Whitethroat, Yellowhammer, Bullfinch, Reed Bunting, Blue
Tit, Long-tailed Tit, Great Tit and Spotted Flycatcher.

Other

Ringlet butterfly.

Large Brown Hawker dragonfly (Aeshna spp).

Large Golden-Striped dragonfly.



Ottenham

Histon

Impington

Milton

Horningsea

Fen Ditton

CAMBRIDGE

Cambridge Airport

Teversham

Fulbourn

Waterbeach

Landbeach

Swaffham Pri

Botolph Claydon

Lode

Stow cum Quy Fen

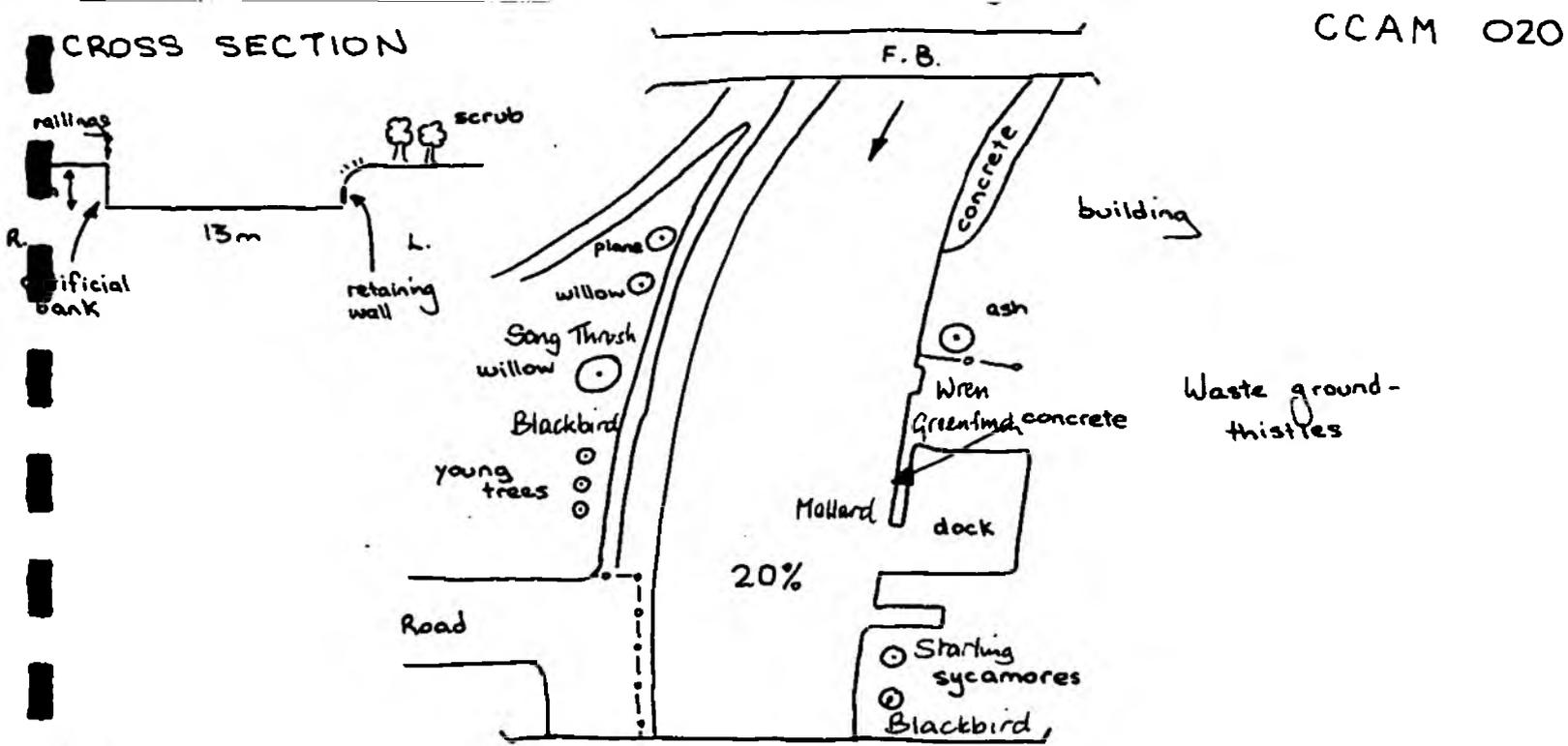
Stow cum Quy

The Bury

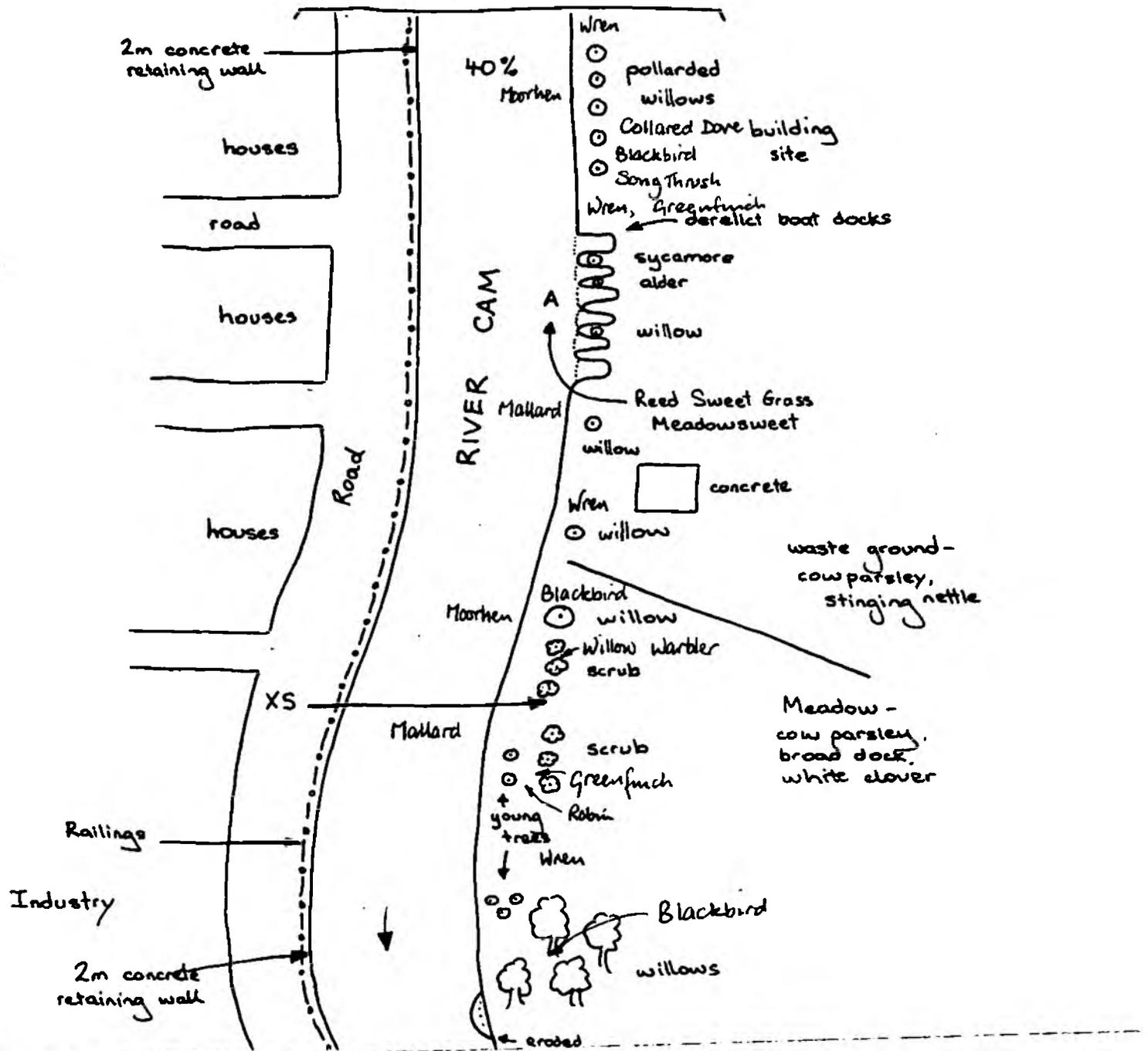
Little Wilbraham

Ferring's Ho

Lower Valley Fm



BRIDGE



CCAM 020

Plant Communities

The river flows through an urban environment. The land use on the left is mixed - there are college boathouses, waste and derelict land, building sites and a meadow. On the right, a park gives way downstream to roads and houses.

The vegetation of the left bank is mixed: there is an interesting area of derelict berths for small boats, where alders and willows occur, and there is a fringe of reed sweet grass and meadowsweet.

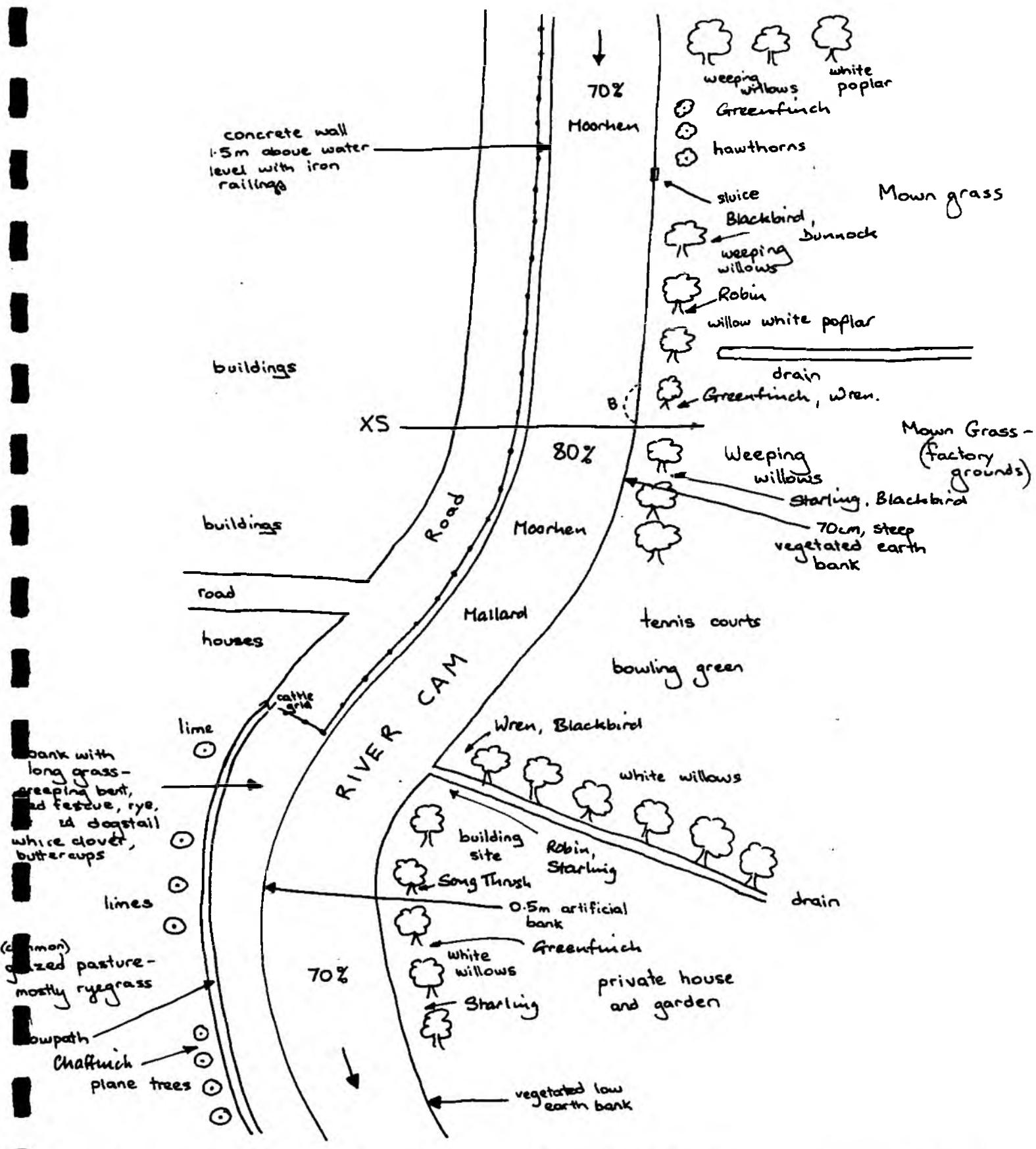
The right bank is artificial (a high concrete wall) for much of the section and so supports little vegetation.

The channel supports unbranched bur-reed and yellow water lily (at 20-40% cover), but both species are damaged by rowing.

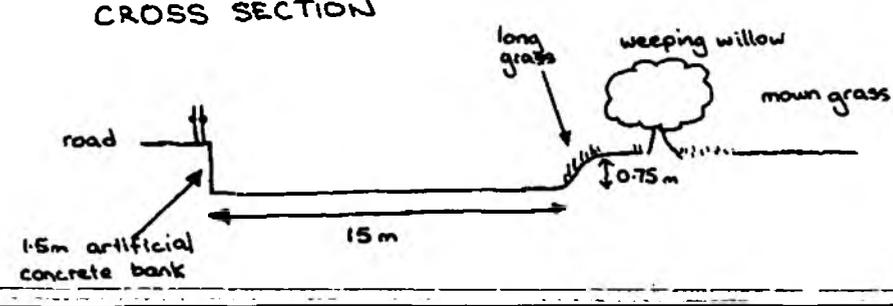
60 plant species recorded.

Breeding Birds

Ten species held a combined total of 24 territories. On the right bank the park upstream held Song Thrush and Blackbird territories, with 2 Moorhen and 3 Mallard territories on the channel. Trees and scrub on the left bank supported territories of Collared Dove, Robin, Starling, Willow Warbler, 3 pairs of Greenfinches and 5 pairs of Blackbird and Wren.



CROSS SECTION



CCAM 021

Plant Communities

A river flowing through an urban environment: on the left side are lawns in front of a factory and weeping willows have been planted along the bank here. Further downstream are a building site and gardens of private houses. The right side is bordered by roads and houses, downstream giving way to Stourbridge Common, a pasture well grazed by cattle and horses.

The left bank is low, steep and natural and is well shaded by riverside trees, so that the ground vegetation is limited and there is little fringing vegetation. Where the road runs parallel to the right bank, there is a high retaining wall. A similar but lower retaining wall comprises the bank at Stourbridge Common, above which the grass bank is grazed, and perennial rye grass, creeping bent, red fescue, crested dogstail, white clover and buttercups are abundant.

The dominant species in the channel are unbranched bur-reed and yellow water lily (70-80% cover), but both species are damaged by rowing.

55 species recorded.

Breeding Birds

Ten species held a combined total of 19 territories. Planted trees, hedges and some scrub on the left bank held territories of Song Thrush, Dunnock, 2 Robins, 2 Wrens, 3 Greenfinches, 3 Blackbirds and 3 Starlings. Plane trees downstream on the right bank held a Chaffinch territory, and the channel and banksides held 2 Moorhen and a Mallard territories.

Plant Communities

A river flowing through an urban environment: the left side is bordered by houses and gardens; the right by Stourbridge Common, a pasture well grazed by cattle and horses.

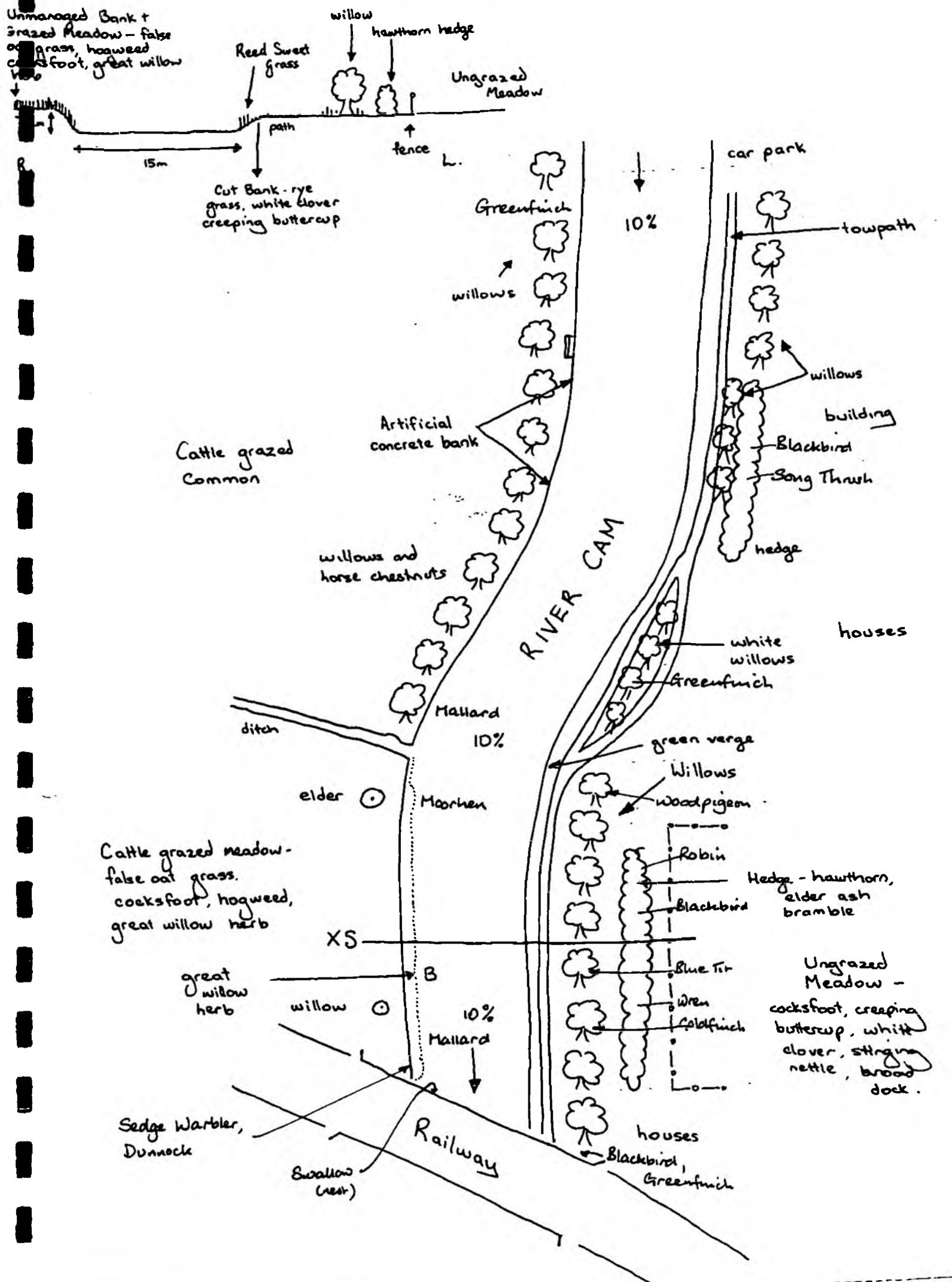
The condition of the left bank varies with the ownership of the adjacent land and there is wooden piling along much of the section, so both the bank vegetation and the fringing vegetation are limited. There is a low retaining wall along much of the right bank. Above the wall the bank is grazed and perennial rye grass, creeping bent, red fescue, crested dogtail, white clover and buttercups are abundant and musk thistle is frequent. There are some fine black Italian poplars lining the right bank.

The dominant species in the channel are unbranched bur-reed and yellow water lily (at 40-75% cover), but both species are damaged by rowing.

42 species recorded.

Breeding Birds

Twelve species held a combined total of 23 territories. The left bank gardens with trees, garden hedges and shrubs held territories of Robin, Woodpigeon, Song Thrush, 3 Blackbirds, 3 Greenfinches, 3 Starlings and 4 Wrens, with a Swallow nesting under the footbridge. Parkland on the right bank held Greenfinch and Chaffinch territories with a House Sparrow nesting in the footbridge girders. In the channel and bankside vegetation were territories of 3 Mallards, a Moorhen and a Mute Swan.



Cattle grazed meadow - false oat grass, cocksfoot, hogweed, great willow herb

Hedge - hawthorn, elder ash, bramble

Ungrazed Meadow - cocksfoot, creeping buttercup, white clover, stinging nettle, broad dock.

Sedge Warbler, Dunneck

Swallow (nest)

Railway

houses
Blackbird, Greenfinch

CCAM 020

Plant Communities

A lowland river with the adjacent land use on the left mainly houses, though a small ungrazed meadow occurs at the downstream end. The right side adjacent land use is entirely pasture, grazed by cattle and horses.

A towpath runs along the left bank; between it and the river is an infrequently mown grass slope with perennial rye grass, white clover and creeping buttercup. On the other side of the towpath is a line of willows and a hawthorn/elder hedge occurs between the willows and the meadow at the downstream end.

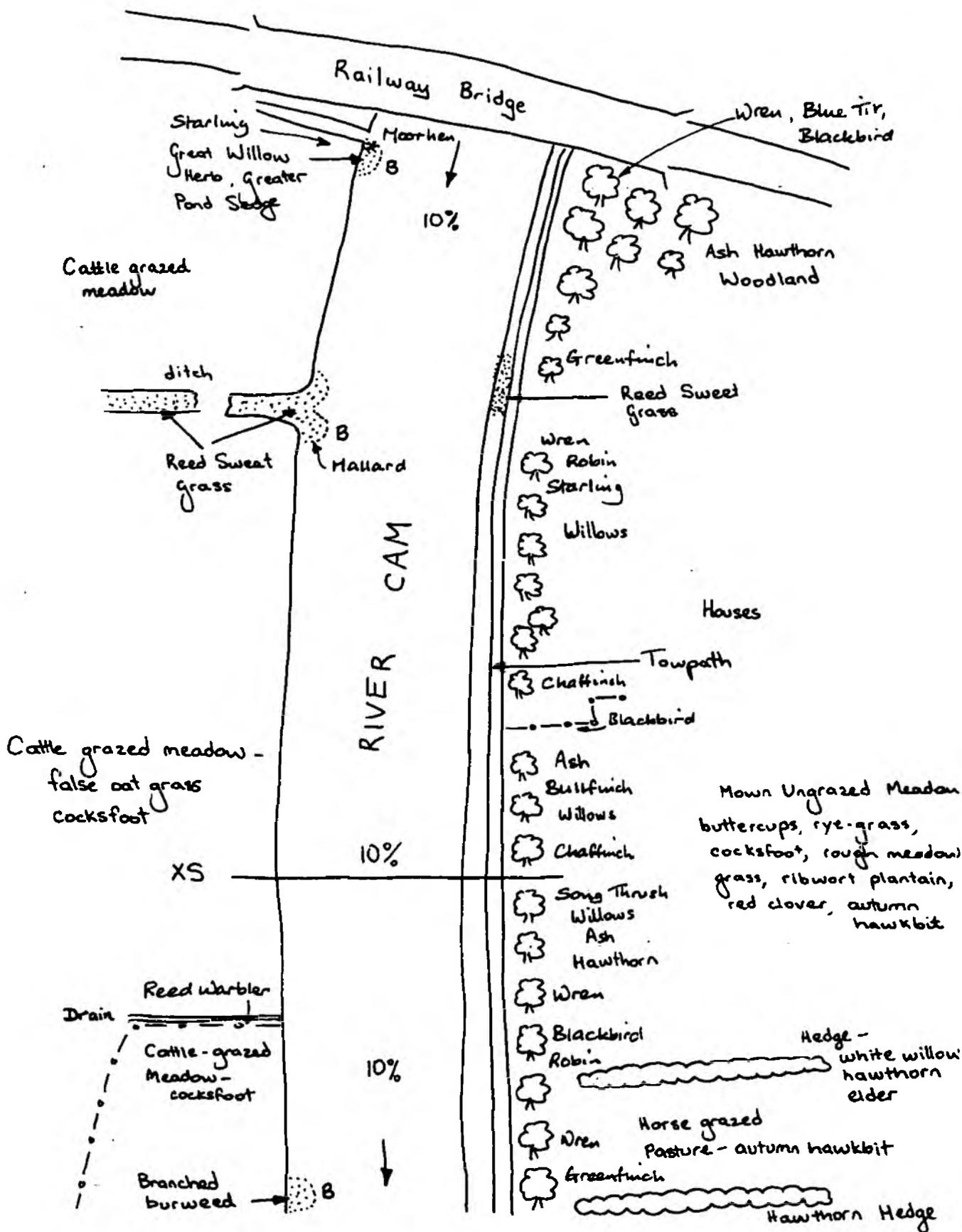
The right bank is grazed above a retaining concrete wall and the flora is dominated by false oat grass, hogweed, cocksfoot and common nettle. There are planted horse chestnuts and willows along the bank. Towards the downstream end is a fringe of great willowherb.

The channel vegetation is mostly unbranched bur-reed at 10% cover but it is damaged by boating.

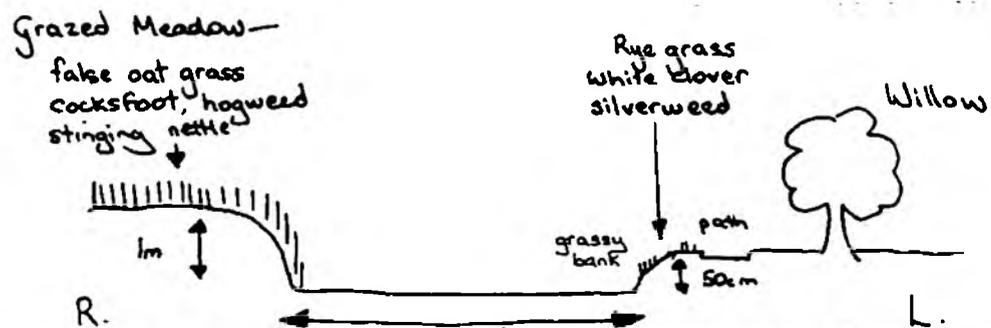
63 species recorded.

Breeding Birds

Thirteen species held a combined total of 18 territories. Planted willows and horse chestnuts on both banks and stretches of hawthorn hedge on the left held territories of Woodpigeon, Blue Tit, Goldfinch, Robin, Wren, Song Thrush, 2 Blackbirds and 2 Greenfinches. Scrub and bushes on the railway embankment downstream, held Dunnock, Blackbird, Greenfinch and Sedge Warbler territories, with a Swallow nesting under the bridge. Moorhen and 2 Mallard territories were centred on the channel.



CROSS SECTION:



CCAM 024

Plant Communities

A lowland river, with the adjacent land use on the left being houses in the upstream half and meadows in the downstream half, which have a rich flora of perennial rye grass, cocksfoot, rough meadow grass, creeping buttercup, meadow buttercup, ribwort plantain, red clover and autumn hawkbit. The right side is bordered by Ditton Meadows (cattle pastures).

A towpath runs along the left bank and between it and the river is an infrequently mown grassy bank, on which the dominant species are perennial rye grass, white clover and silverweed, and there is one patch of reed sweet grass and marsh woundwort. On the far side of the towpath is a line of willows, ash and hawthorn.

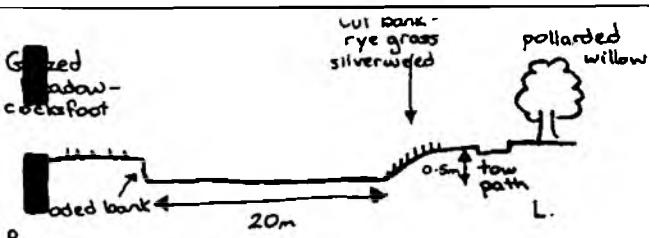
The dominant species on the right bank are false oat grass, cocksfoot, hogweed and common nettle. There is a small patch of fringing branched bur-reed at the downstream end.

The channel vegetation is mostly unbranched bur-reed (at 10% cover) but it is damaged by boating.

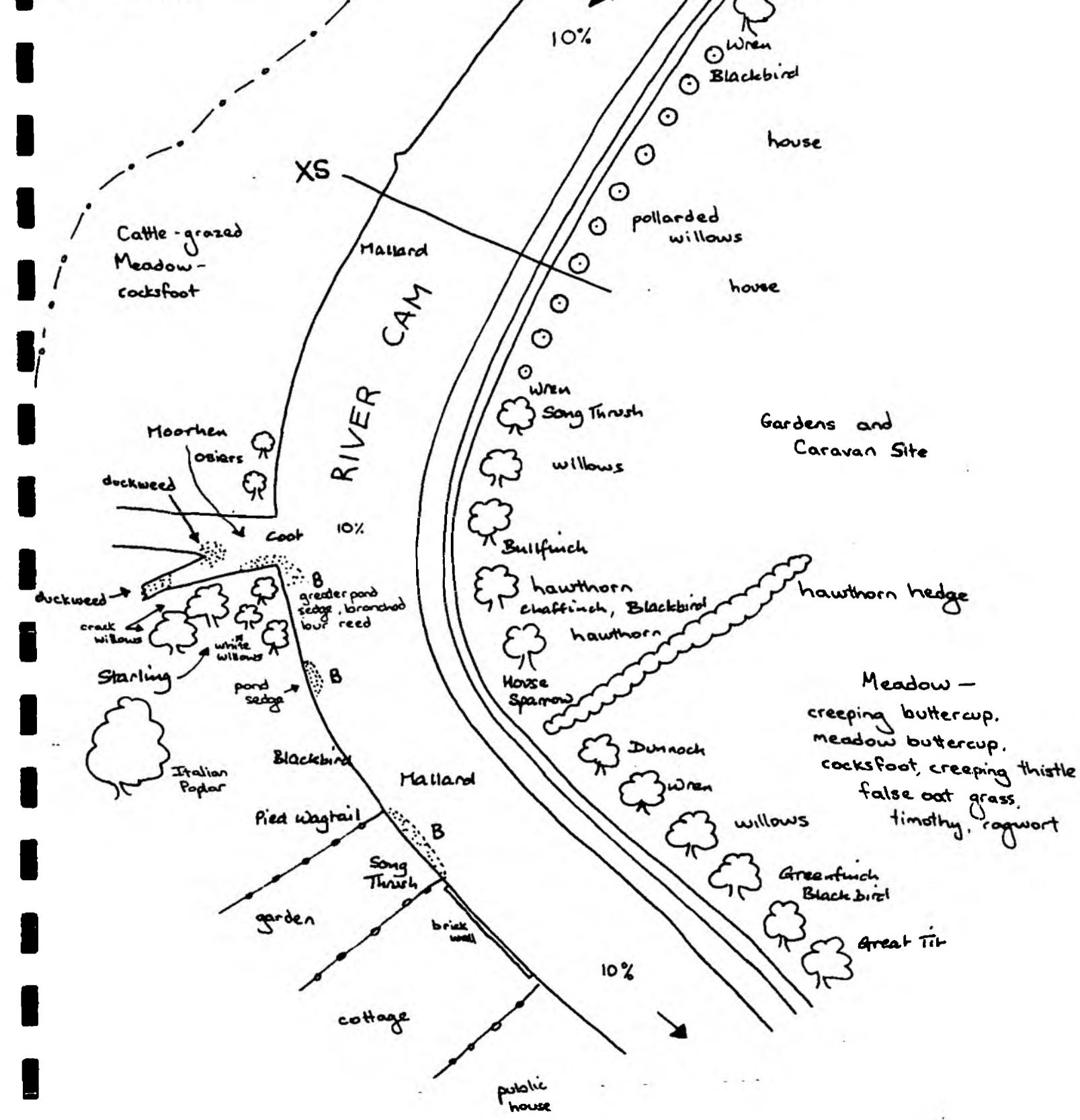
63 species recorded.

Breeding Birds

Twelve species held a combined total of 21 territories. Gardens and trees lining the left bank towpath held territories of Starling, Song Thrush, Blue Tit, Bullfinch, 2 Chaffinches, 2 Greenfinches, 2 Robins and 4 Wrens. A patch of bushes and trees on the right bank just below the railway embankment held a Starling territory, and downstream on this bank, a pair of Reed Warblers used a reed choked drain. In the channel and bankside vegetation were Moorhen and Mallard territories.



CROSS SECTION



CCAM 025

Plant Communities

A lowland river flowing through a varied landscape of, on the left, housing, a caravan site and a meadow with a rich flora of creeping buttercup, meadow buttercup, cocksfoot, creeping thistle, false oat grass, ribwort plantain, timothy and ragwort. On the right the adjacent land use comprises meadows and Fen Ditton village.

A towpath runs along the left bank, between it and the river is an infrequently mown grassy bank on which the dominant species are perennial rye grass and silverweed. On the far side of the towpath is a line of willows, some pollarded, and hawthorns.

The right bank through the pasture, is well grazed by cattle and is dominated by cocksfoot. An inlet, halfway along the section, supports greater pond sedge, reed sweet grass and branched bur-reed. The poplars in the meadows include a particularly fine tree, which may be the native black poplar, rather than a black Italian poplar.

The channel vegetation is mostly unbranched bur-reed at 10% cover, but it is damaged by boating.

61 species recorded.

Breeding Birds

Fourteen species held a combined total of 21 territories. Trees lining the towpath on the left bank held territories of Greenfinch, Chaffinch, Bullfinch, House Sparrow, Dunnock, Great Tit, Song Thrush, 3 Blackbirds and 3 Wrens. The right bank held Coot and Moorhen territories, with a pair of Starlings in surrounding trees. Downstream gardens on this bank held Song Thrush, Pied Wagtail and Blackbird territories with Moorhen and 2 Mallard territories centred on the channel.

CCAM 026

Plant Communities

A lowland river flowing through a pastoral landscape. The small pastures on the left side are separated from each other by hawthorn hedges and have a varied flora of false oat grass, cocksfoot, broad-leaved dock, ragwort and meadow buttercup. One pasture appears to be wetter than the others and has good colonies of water mint and amphibious bistort. On the right are gardens, and an ungrazed meadow in which coarse grasses are dominant.

A towpath runs along the left bank; between it and the river is an infrequently mown slope dominated by perennial rye grass. On the far side of the towpath is a line of willows.

The willows along the right bank include some pollards. The herbaceous flora is dominated by common nettle, cocksfoot, meadow foxtail and false oat grass. There are small areas where the fringing vegetation is well developed and it comprises branched bur-reed, greater pond sedge and great willowherb.

The channel vegetation is slightly denser than upstream as it is further away from Cambridge. Unbranched bur-reed is the main species, at 10-15% cover.

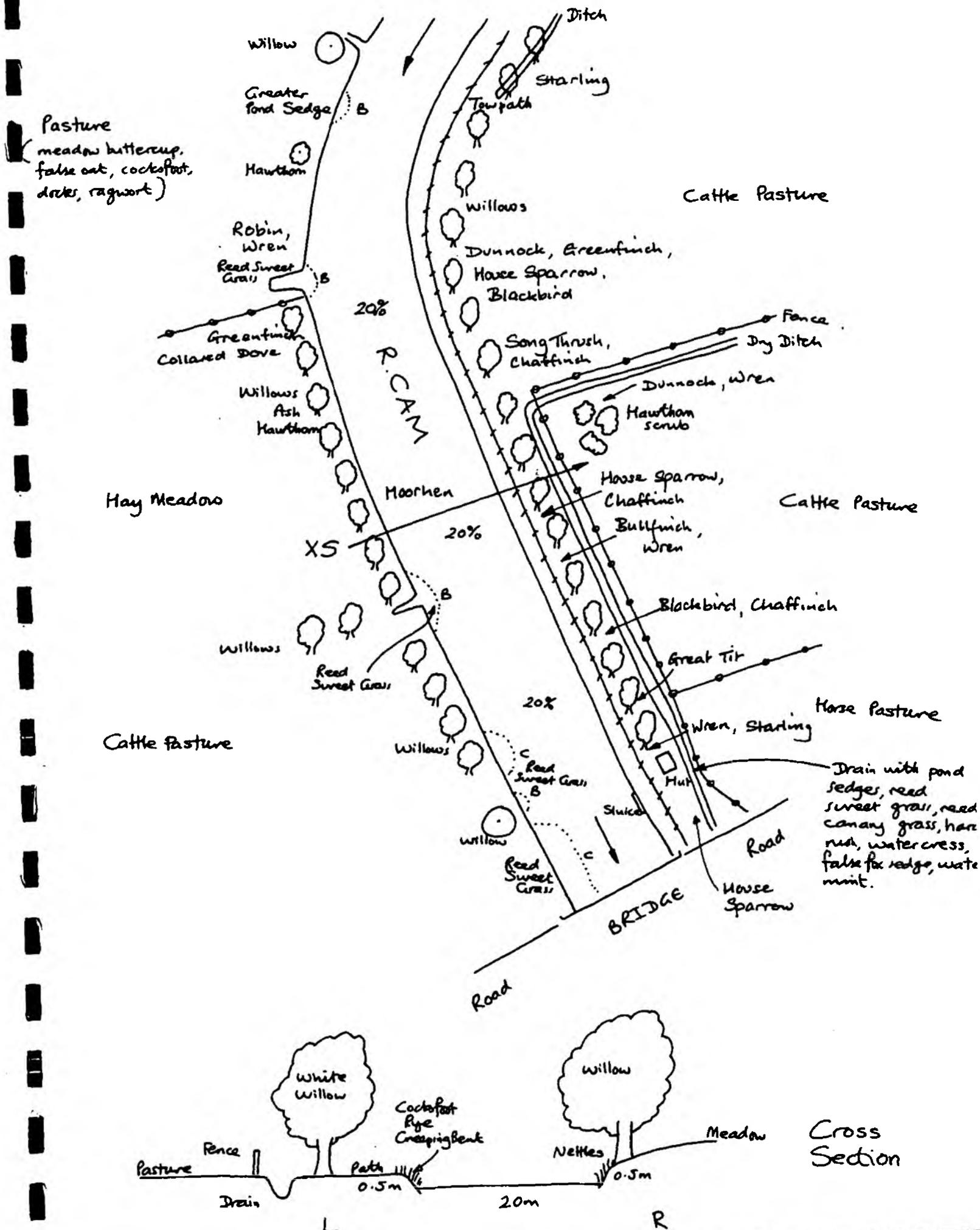
51 species recorded.

Breeding Birds

Fifteen species held a combined total of 25 territories. The tree-lined left bank with abutting hedges held territories of Starling, Willow Warbler, Chaffinch, Song Thrush, Magpie, Bullfinch, Dunnock, Greenfinch, 3 House Sparrows, 3 Blackbirds and 3 Wrens. Scattered trees and a small area of bushes around a side drain on the right bank held territories of Robin, Starling, Woodpigeon, Song Thrush, Spotted Flycatcher and 2 Wrens. The channel and banksides held a Mallard territory.

Other

Hawker dragonflies.



Plant Communities

A lowland river with the adjacent land use on both sides being horse and cattle grazed pastures.

A towpath runs along the left bank; between it and the river is an infrequently mown grassy slope dominated by perennial rye grass, creeping bent and cocksfoot. On the far side of the towpath is a line of willows. A parallel ditch supports an interesting and varied flora, including lesser pond sedge, greater pond sedge, reed sweet grass, reed canary grass, hard rush, watercress, false fox sedge, water mint and gipsywort. There is no fringing vegetation.

The right bank is shaded for much of its length by willows, ash and hawthorn, which allow little herbaceous vegetation to grow. There is a well developed fringe of reed sweet grass at the downstream end.

The channel vegetation is dominated by unbranched bur-reed and is denser than upstream because of increased distance from Cambridge, and thus subject to less disturbance from boats. Cover is about 20%.

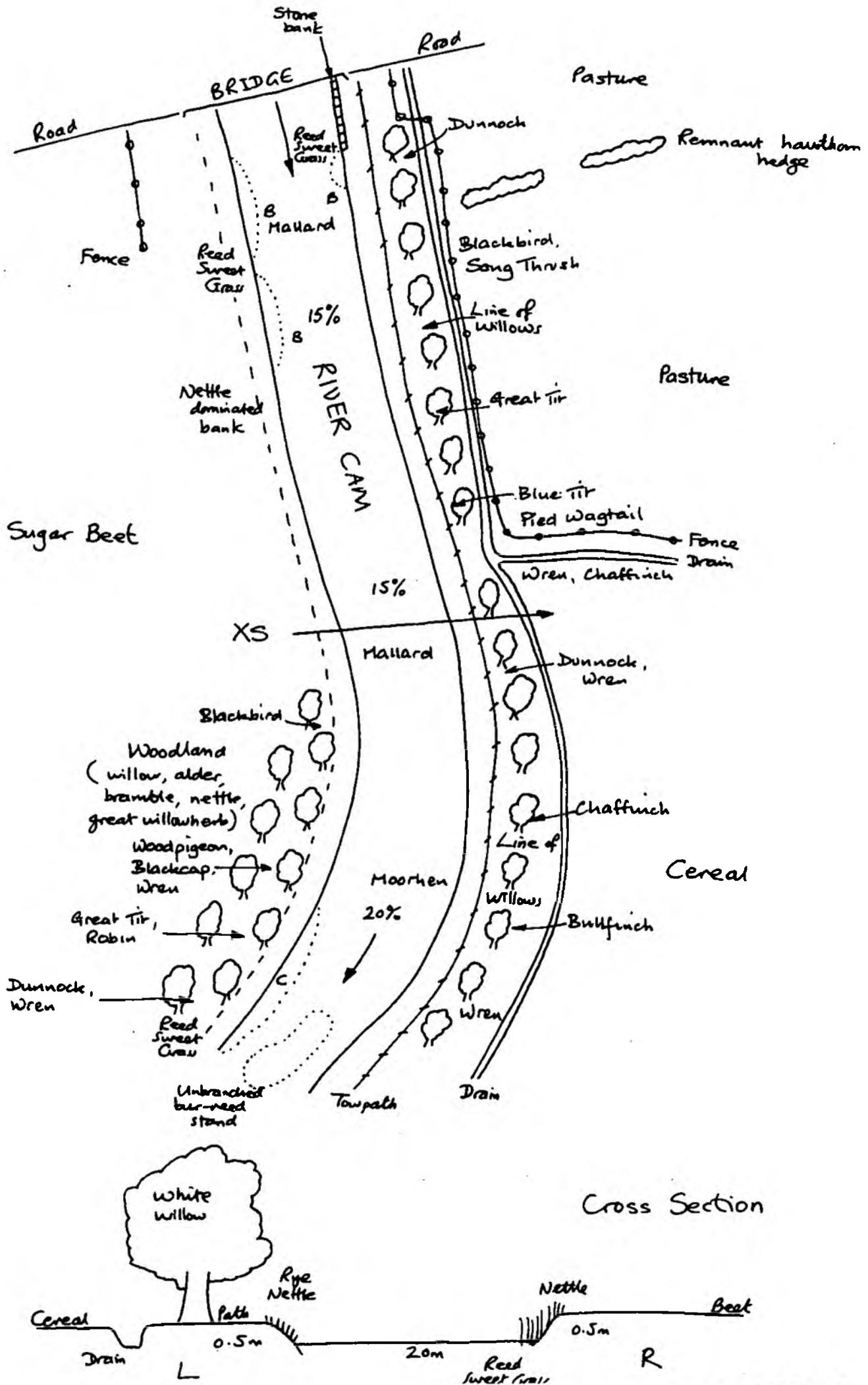
65 species recorded.

Breeding Birds

Thirteen species held a combined total of 24 territories. Willows and a hedgerow lining the left bank towpath held territories of Bullfinch, Great Tit, Song Thrush, 2 Dunnocks, 2 Starlings, 2 Blackbirds, 3 House Sparrows, 4 Chaffinches and 4 Wrens. Bushes around the drain inlet on the right held territories of Collared Dove, Wren, Robin and Greenfinch with a Moorhen territory centred on the channel.

Other

Hawker dragonflies.



CORN 028

Plant Communities

A lowland river. On the left side is pasture in the upstream half and arable (cereals) in the downstream half. On the right, there is mostly arable (sugar beet) with a small wood of alder and white willow at the downstream end.

A towpath runs along the left bank. Between it and the river is an infrequently mown grassy slope dominated by perennial rye grass and on the far side is a line of willows. A ditch runs parallel to the river between the willows and the adjacent land.

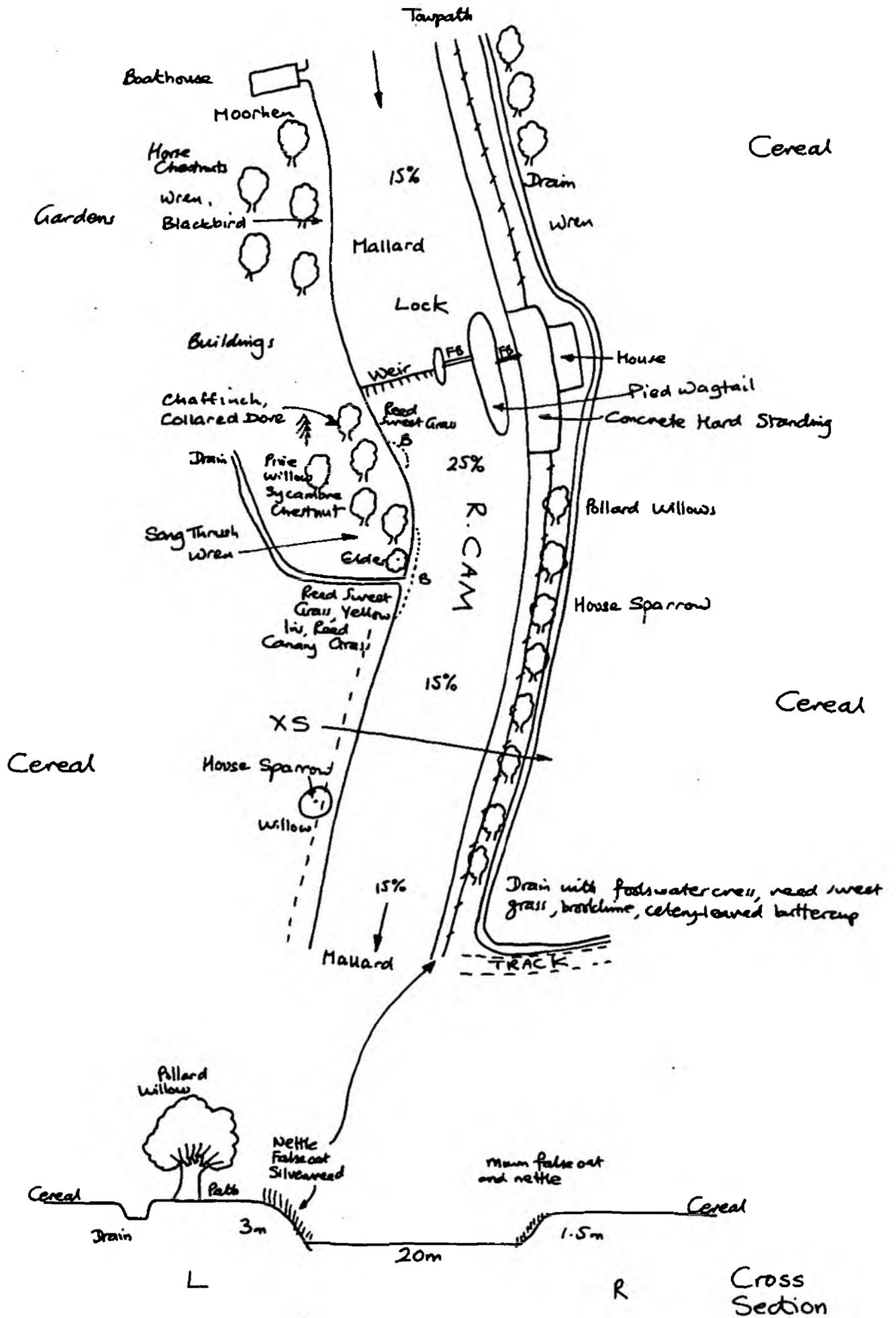
The vegetation on the right bank is dominated by common nettle. Through the wood the bank is unmanaged and dominated by great willowherb. There is a more or less continuous fringe of reed sweet grass which becomes quite broad in places.

The channel vegetation is dominated by unbranched bur-reed which becomes quite dense in places. Yellow water lily and arrowhead also occur. Cover is 15-20%.

62 species recorded.

Breeding Birds

Fourteen species held a combined total of 24 territories. Trees and the hedgerow lining the left bank towpath held territories of Bullfinch, Blackbird, Song Thrush, Great Tit, Blue Tit, Pied Wagtail, 2 Dunnocks, 2 Chaffinches and 3 Wrens. Mixed woodland downstream on the right bank held Great Tit, Robin, Dunnock, Blackbird, Blackcap, Woodpigeon and 2 Wren territories, with those of 2 Mallards and a Moorhen in the channel and banksides.



CCAM 029

Plant Communities

A section of lowland river, passing through Baits Bite Lock. The left side adjacent land use is arable (cereals). The right side is bordered at the upstream end by the lockkeeper's house and gardens in which there are a number of mature trees. At the downstream end the adjacent land is cereal farmland.

A towpath runs along the left bank; between it and the river is a grassy bank. Upstream from the lock, the dominant species is perennial rye grass and the bank slopes gently down to the river whereas downstream where the towpath is about 3m above the level of the river and the dominant species are false oat grass, silverweed and common nettle. Between the towpath and the adjacent land is a line of willows, pollarded downstream from the lock. At the downstream end a ditch running perpendicular to the river supports reed sweet grass, fool's watercress, brooklime and celery-leaved buttercup in abundance. There is no fringing vegetation.

The right bank vegetation is mown. There are areas of fringing reed sweet grass and reed canary grass.

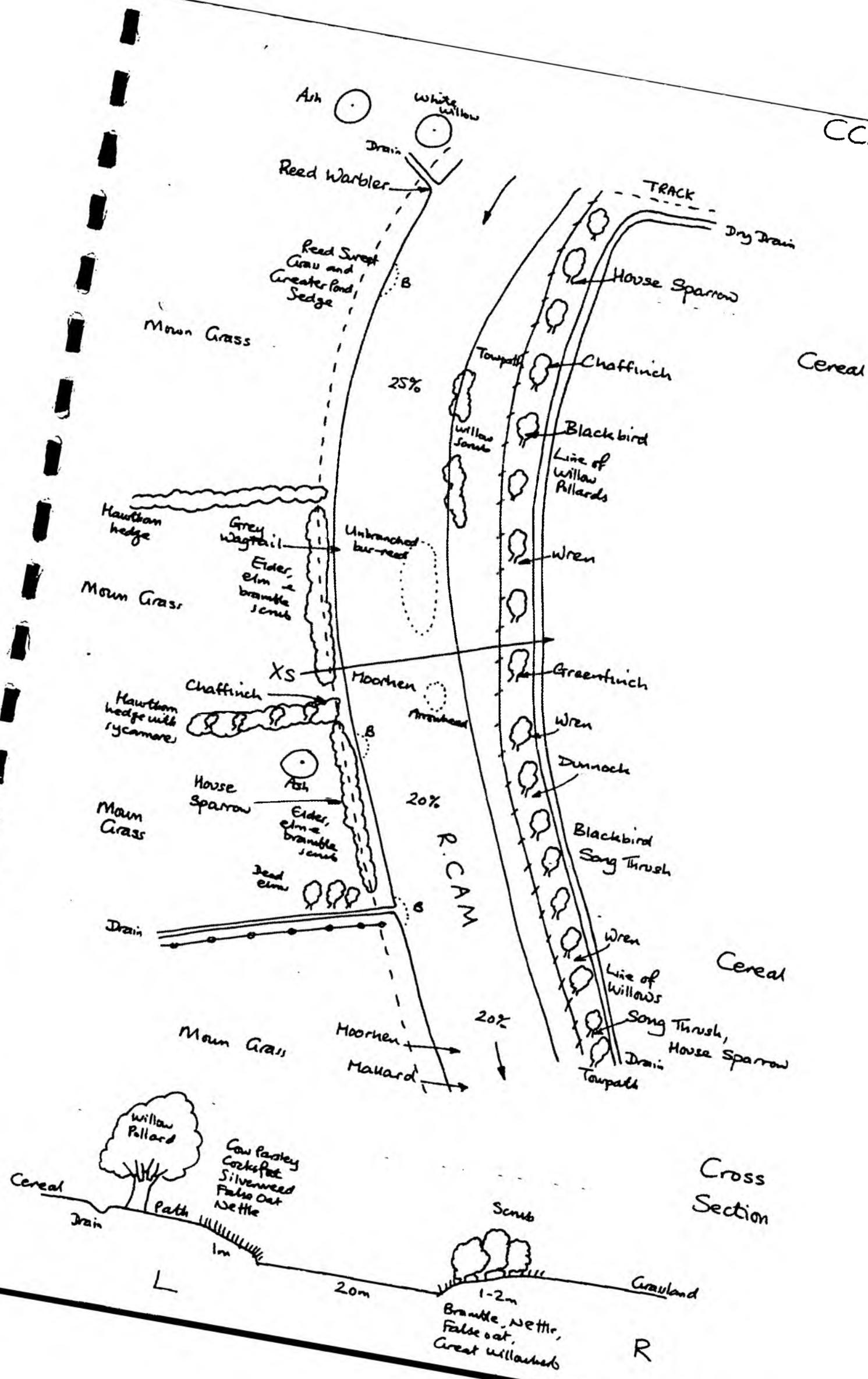
The channel vegetation is most abundant immediately downstream from Baits Bite Lock. Unbranched bur-reed is the dominant species and cover varies between 15 and 25%.

60 species recorded.

Breeding Birds

Nine species held a combined total of 13 territories in this section. Mixed woodland on the upstream half of the right bank held a Moorhen nest and territories of Blackbird, Song Thrush, Collared Dove, Chaffinch and 2 Wrens, with a pair of House Sparrows nesting in a willow downstream on the same bank. Two Mallard territories were centred on the channel and bankside vegetation. A Pied Wagtail nested at the lock and a Wren held territory among pollard willows on the left bank.

Other species recorded but not shown to hold territories included Sedge Warbler, Willow Warbler, Yellow Wagtail and Grey Wagtail.



CCAN 030

Plant Communities

A lowland river, with the adjacent land use on the left being cereal farmland, with mown grassland on the right.

The left bank is unmanaged, and the dominant species are false oat grass, cockfoot, cow parsley, silverweed and common nettle. There are patches of willow scrub on the bank. Beyond the bank is a t^opath and a line of willows, pollarded at the upstream end.

The right bank is topped in places by a overgrown hedge of elder, elm and bramble and the dominant herbaceous species are common nettle, false oat grass and great willowherb.

There is little fringing vegetation to either bank, but the channel vegetation is well developed in places, consisting of unbranched bur-reed and arrowhead, at 20-25% cover.

53 species recorded.

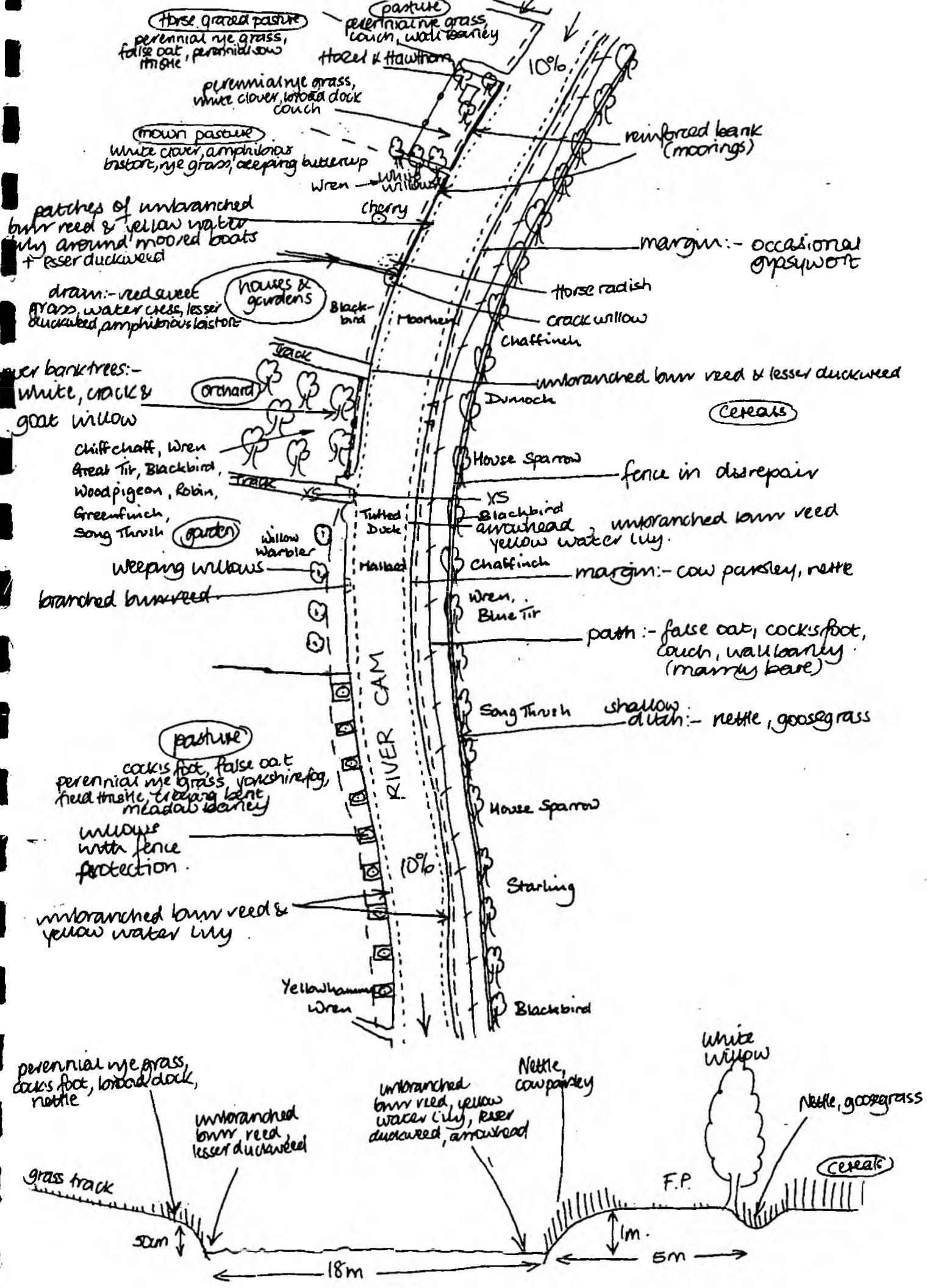
Breeding Birds

Eleven species held a combined total of 19 territories. On the right bank, an upstream drain held a Reed Warbler territory and trees and scrub in midsection held territories of Chaffinch and House Sparrow. A pair of Grey Wagtails used the meadow and fringe a little further along, and territories of Mallard and 2 Moorhens were centred on the channel. Willows lining the left bank towpath held territories of Chaffinch, Dunnock, Greenfinch, 2 Blackbirds, 2 House Sparrows, 2 Song Thrushes and 3 Wrens.

Other species recorded but not shown to hold territories included Little Grebe, Magpie, Sedge Warbler, Long-tailed Tit, Mute Swan and Woodpigeon.

Other

Hawker dragonflies.



Horse grazed pasture
perennial ryegrass,
false oat, perennial sow
thistle

pasture
perennial ryegrass,
couch, wall barley
Hazel & Hawthorn

perennial ryegrass,
white clover, broad dock
couch

mown pasture
white clover, amphibious
bistort, ryegrass, sleeping buttercup

patches of unbranched
burr reed & yellow water
lily around moored boats
+ lesser duckweed

drain:- reed sweet
grass, water cress, lesser
duckweed, amphibious bistort

**houses &
gardens**

over bank trees:-
white, crack &
goat willow

orchard

chiffchaff, Wren
Great Tit, Blackbird,
Woodpigeon, Robin,
Greenfinch,
Song Thrush

garden

weeping willows

branched burr reed

pasture

cocksfoot, false oat
perennial ryegrass, yorkshire fog,
field thistle, creeping bent,
meadow barley

willows
with fence
protection

unbranched burr reed &
yellow water lily

Yellowhammer
Wren

perennial ryegrass,
cocksfoot, broad dock,
nettle

unbranched
burr reed,
lesser duckweed

unbranched
burr reed, yellow
water lily, lesser
duckweed, arrowweed

Nettle,
cow parsley

White
Willow

Nettle, goosegrass

Cereals

grass track

50cm

18m

1m

5m

F.P.

CCAM 001

Plant Communities

A wide trapezoidal channel with low, steep banks. The left side land use is arable (cereals) and the right is pasture and gardens (Horningsea village).

The left bank is dominated by a line of willows along the ditch 5-6m from the river. The ditch is dry, with goosegrass and nettle. The footpath is mainly unvegetated, with occasional false oat, cocksfoot and wall barley. The rough margin is predominantly nettle and cow parsley, with occasional gipsywort. There is no fringing vegetation.

The right bank at the downstream end is dominated by cocksfoot, perennial rye grass and Yorkshire fog. The margin has a line of planted willows, with fenced protection. The orchard in midsection has willows bordering the river. Upstream, there are moorings but the bank itself is artificial. There is a little fringing branched bur-reed in midsection.

The river is slow flowing and supports unbranched bur-reed, arrowhead and duckweed at 10% cover, concentrated in bands parallel to each bank.

73 species recorded.

Breeding Birds

Eighteen species held a combined total of 27 territories. Willows lining the left bank towpath held territories Chaffinch, Duncock, Starling, Blue Tit, Wren, Song Thrush, 2 Blackbirds and 2 House Sparrows. On the right bank, gardens and an orchard supported Woodpigeon, Robin, Great Tit, Greenfinch, Willow Warbler, Chiffchaff, Song Thrush, 2 Blackbirds and 2 Wrens, with a Yellowhammer and 4th Wren territories in a hedge at the downstream end. Moorhen, Mallard and Tufted Duck territories were centred on the channel.

Other species recorded but not shown to hold territories included Skylark, Meadow Pipit, Stock Dove and Bullfinch.

marginal: field thristle, reed canary, couch

pasture/hay meadow

false oat, perennial rye grass, cocks foot, field thristle, creeping bent, Yorkshire fog, meadow barley

field maple, wayfaring tree & osters, with fence protection

Bittersweet, reed sweet grass, great willow herb, branched linn reed.

Blackthorn, elder, hawthorn & torrickle

drain: great willow herb, nettle, hedge bindweed, goosegrass, gipsywort

cereals

white & crack willows

RIVER CANAL

unbranched linn reed (7-8m) & yellow water lily, arrowhead, flowering rush, fennel pondweed

marginal: great willow herb, nettle, false oat, rough meadow grass, field thristle

beet

cereals

white willow

Manard

great willow herb, field thristle, reed canary, couch

Semi improved pasture

perennial rye grass, cocks foot, creeping bent, field thristle

unbranched linn reed, arrowhead, yellow water lily, fennel pondweed

nettle, field thristle, false oat, cocks foot, perennial sowthistle

pollard white willow

space goosegrass & nettle

Hawthorn

F.P.

gipsy-wort



Woodpigeon

mainly bare, with some cocks foot & perennial rye grass.

Wren

Blackbird

branched linn reed & water figwort.

Bullfinch, Yellowhammer

Improved grassland

arable

Chaffinch, Wren, Song Thrush

crack & white willows with occasional Ash.

Slight ridge

Blackbird

unbranched linn reed

Hawthorn, Blackthorn, elder, midland hawthorn.

Edge Warbler

Wall barley, poppy, slender fox tail, reed canary grass, prickly lettuce

Chaffinch, Yellowhammer, Wren

water figwort, water cress.

Sluice

18m

6m

CCAN 002

Plant Communities

A wide, trapezoidal channel, with low but steep banks. The ridge in the field adjoining the left bank is mainly ploughed out and only 50cm above the height of the field. The left side land used is arable and improved grassland. The right side is arable (cereals and beet) with pasture at the upstream end.

The left bank is dominated by the line of pollarded willows along the ditch (m from the river). There is also a hedge behind the ditch (mainly Hawthorn). The well-trodden footpath is mainly unvegetated with occasional perennial rye grass and cocksfoot. The rough margin is dominated by nettle, thistles, false oat and cocksfoot, with occasional perennial sow thistle. There is no fringing vegetation.

The right bank has occasional willows where the river is adjoined by arable, with a rough margin of great willowherb, false oat, nettle and thistles. At the upstream end, the grazed bank is dominated by perennial rye grass, cocksfoot and false oat with a rough margin of reed canary grass, thistles and couch. There are also planted maple and osiers with fence protection. The fringe consists of a little flowering rush and reed canary grass.

The river is slow flowing and supports unbranched bur-reed, yellow water lily, arrowhead, duckweeds and fennel-leaved pondweed at 15-20% cover.

77 species recorded.

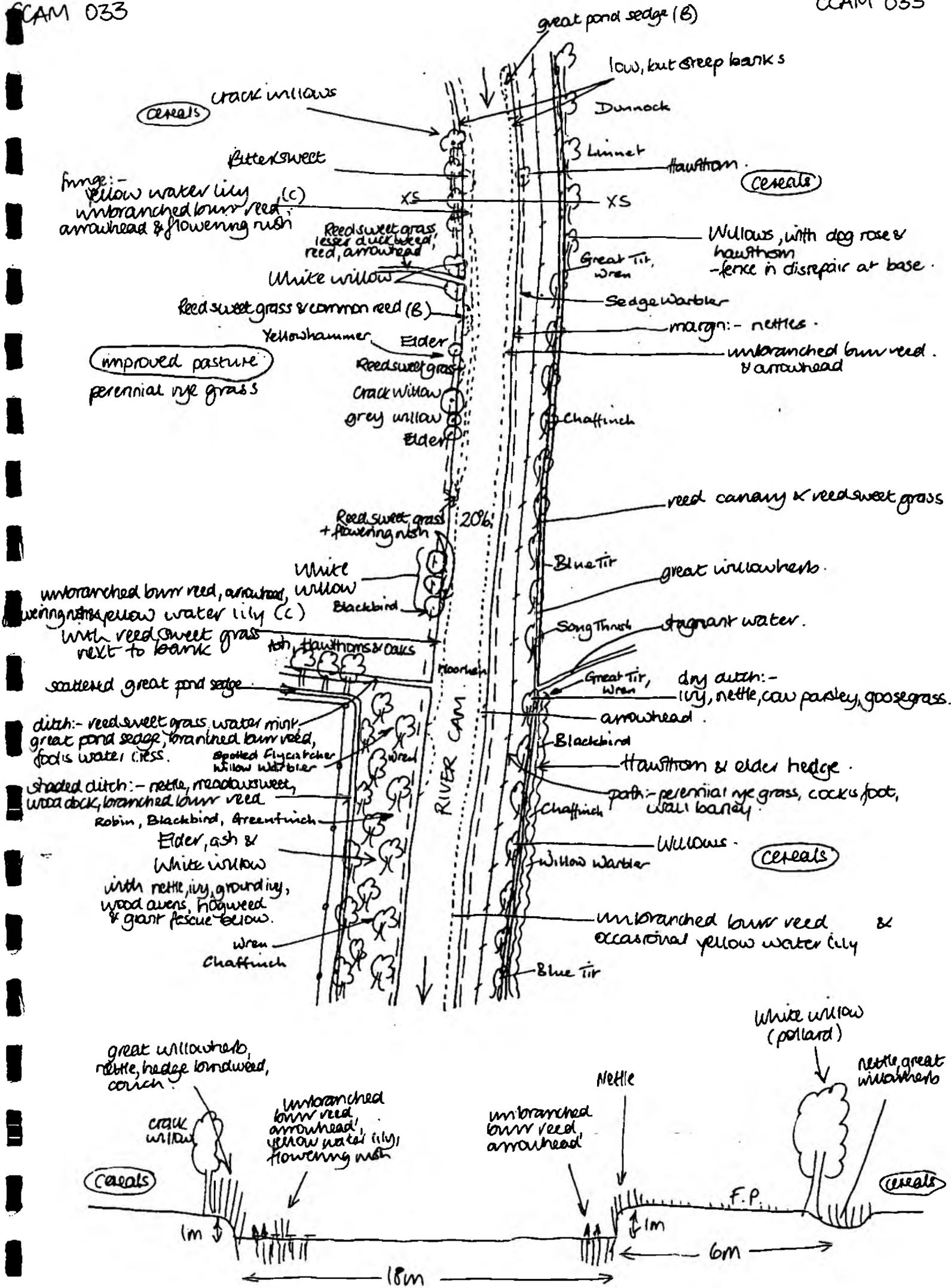
Breeding Birds

Nine species held a combined total of 15 territories. The row of pollarded willows and adjacent hedge lining the left bank township supported territories of Sedge Warbler, Woodpigeon, Bullfinch, Song Thrush, 2 Blackbirds, 2 Chaffinches, 2 Yellowhammers and 3 Wrens, with a 4th Wren territory in an abutting hedge on the right bank, and a Mallard territory centred on the stream.

In addition, a Kingfisher flew downstream on April 11 and May 2. Great Crested Grebe and Tufted Duck were also seen but not shown to hold territory.

Other

Small White, Gatekeeper and Wall Brown butterflies.



CCAM 833

Plant Communities

A wide, trapezoidal channel, with low, but steep banks. The left side land use is arable (cereal), as is the right side (cereal) which also has pasture.

The left bank is dominated by the line of willows (pollarded) along the ditch, 6-7m from the river. The ditch is mainly dry or damp, with patches of great willowherb, reed canary grass and reed sweet grass. The well-trodden footpath is mainly unvegetated, but has patches of perennial rye grass, cocksfoot and wall barley. The rough margin is predominantly nettle.

The downstream half of the right bank is wooded with ash, elder and willow, with a ditch behind containing nettle, branched bur-reed and meadowsweet. The bank is dominated by nettle, ivy, giant fescue and wood avens. The midsection has perennial rye grass dominant, the rough margin throughout the upstream half is dominated by great willowherb, nettle, hedge bindweed and couch, with scattered willows and elder. The fringe consists of patches of flowering rush, reed and reed sweet grass.

The river is slow flowing with cover of 15-20% of unbranched bur-reed, yellow water lily and arrowhead.

77 species recorded.

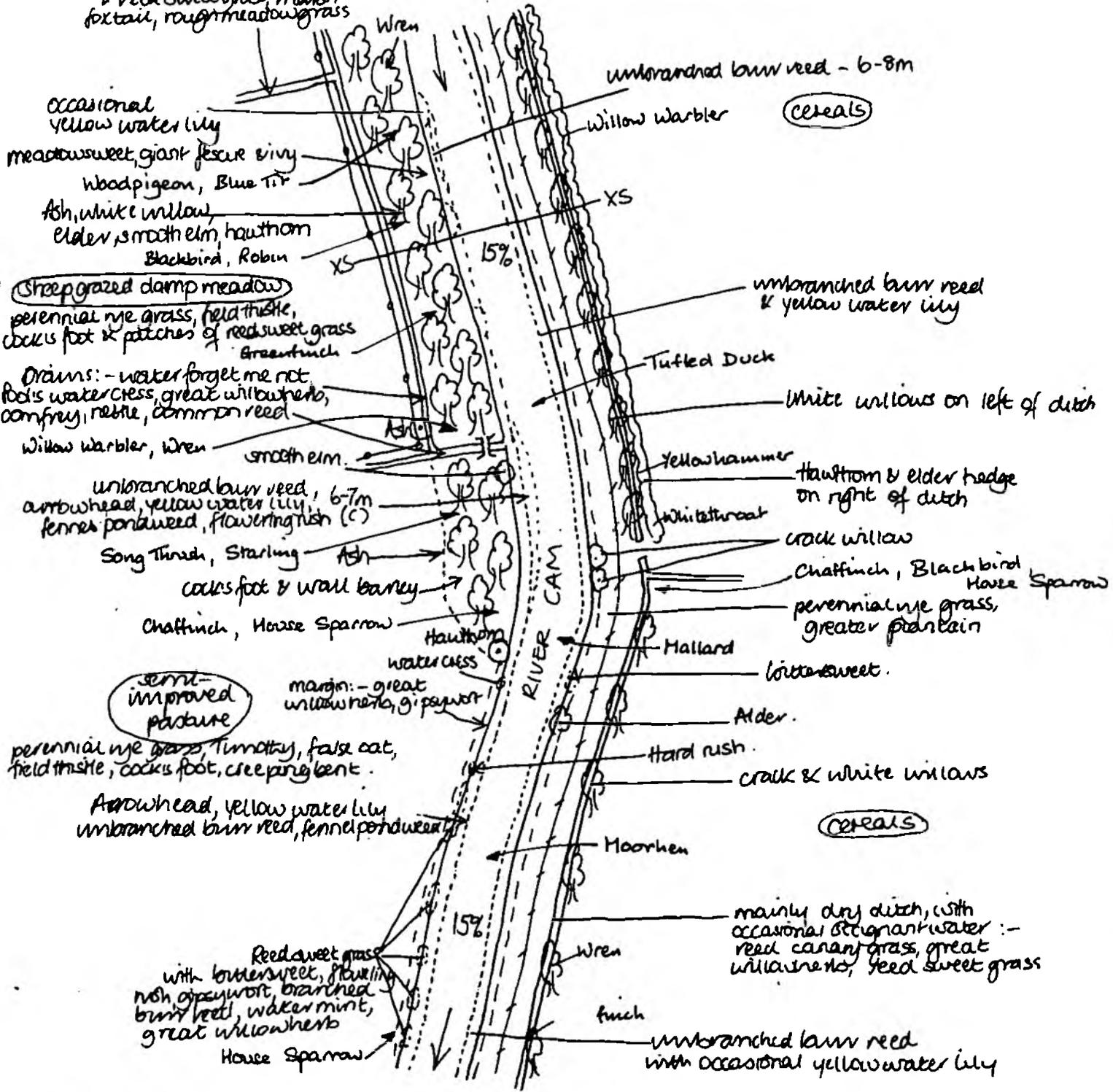
Breeding Birds

Sixteen species held a combined total of 25 territories. Bushes and trees on both banks held territories of Linnet, Dunnock, Willow Warbler, Yellowhammer, Song Thrush, 2 Blackbirds, 2 Chaffinches, 2 Blue Tits, 2 Great Tits and 2 Wrens, with a Sedge Warbler using tall herbs in the soke dyke and bank. The belt of ash and willow woodland downstream on the right bank held Blackcap, Chaffinch, Greenfinch, Robin, Willow Warbler, Spotted Flycatcher and 2 Wren territories, with a Moorhen territory centred on the channel and banksides.

Other

Red Admiral and Gatekeeper butterflies.
Brown Hawker dragonfly.

damp ditch: - bicale
& reed sweet grass, marsh
foxtail, rough meadow grass



semi-improved pasture
rye grass, yarrow, field thistle, tufted hair grass

Ash, Hawthorn, smooth elm, crack & white willows

ground ivy & garden mustard

reed sweet grass, hedge bindweed

unbranched burr reed & arrowhead

nettle, cocks foot

white willow (pollard)

Hawthorn

F.P.

cereals



CCAM 834

Plant Communities

A wide, trapezoidal channel, with low, but steep banks. The left side land use is arable (cereals), the right side is pasture (some semi-improved).

The left bank is dominated by the line of pollarded willows along the ditch 6-7m from the river. The ditch has occasional patches of reed canary grass, reed sweet grass and great willowherb. The well-trodden footpath is mainly unvegetated, but has occasional greater plantain and perennial rye grass. The taller margin has nettle and cocksfoot dominant, with a few patches of bittersweet. There is a little fringing bittersweet.

The right bank is wooded along most of its length, with ash dominant, plus willows, elder, elm and hawthorn and below the trees, giant fescue and ivy are dominant, plus patches of meadowsweet. Downstream, the grazed bank is dominated by perennial rye grass, plus timothy and cocksfoot. The rough margin is mainly of great willowherb and gipsywort. The fringe consists of patches of reed sweet grass and flowering rush. The soak ditch contains great willowherb, common reed and fool's watercress.

The river is slow flowing and supports unbranched bur-reed, yellow water lily, arrowhead and fennel-leaved pondweed at 15% cover.

72 species recorded.

Breeding Birds

Seventeen species held a combined total of 24 territories. Pollard willows on the left bank with the adjacent soak dyke and bordering hedge held territories of Blackbird, Chaffinch, Goldfinch, House Sparrow, Whitethroat, Willow Warbler, Wren and Yellowhammer. The channel and banks held Mallard, Tufted Duck and Moorhen territories. Ash woodland upstream on the right bank held House Sparrow, Blackbird, Blue Tit, Chaffinch, Greenfinch, Song Thrush, Starling, Robin, Willow Warbler, Woodpigeon and 2 Wren territories, with another pair of House Sparrows in a single tree downstream.

Other species recorded but not shown to hold territories included Common Sandpiper, Great Crested Grebe, Cuckoo, Mute Swan and Skylark.

Other

Brown Hawker dragonfly

CCAM 035

Plant Communities

A wide, trapezoidal channel, with low but steep banks, except at the downstream end on the right, which is raised. The left side land use is arable (cereals) plus a hotel at the downstream end. The right side has houses and gardens, and pasture at the upstream end.

The left bank, below the bridge, is managed as lawns and supports some mature trees. Upstream there is a line of willows along the ditch 7-8m from the river. The well trodden footpath is mainly unvegetated, but has occasional greater plantain and rough meadowgrass. The river margin is dominated by nettle, plus great willowherb and occasional water figwort. There is no fringing vegetation.

Downstream of the bridge, the mown right bank has Yorkshire fog, perennial rye grass, silverweed and daisy dominant. The grazed length at the upstream end is dominated by perennial rye grass and couch, with timothy and buttercups. Elsewhere, the bank was inaccessible on account of the adjacent housing. The fringe consists of patches of reed sweet grass and branched bur-reed.

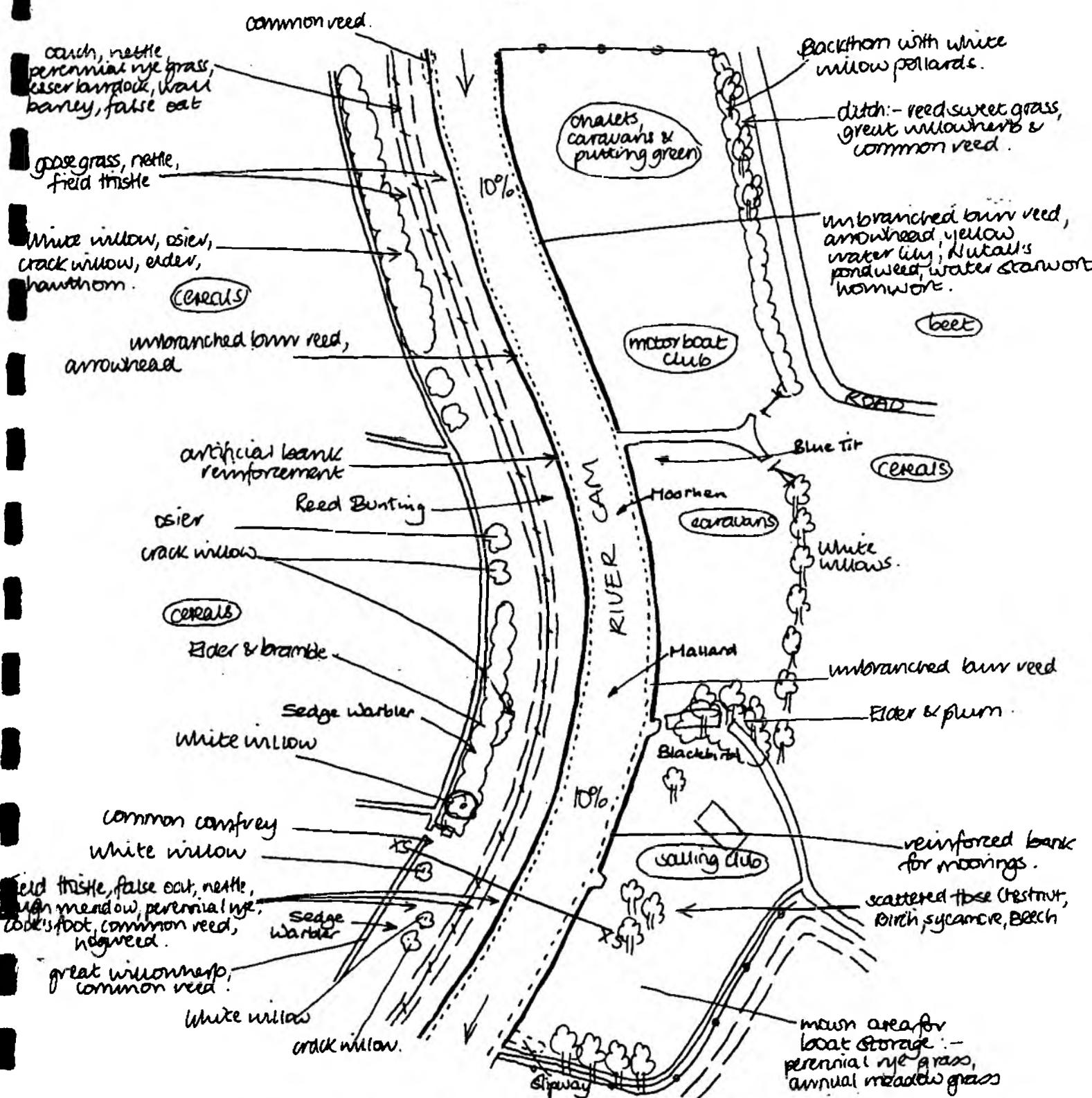
The river is slow flowing, and supports unbranched bur-reed, yellow water lily and arrowhead at 10-15%.

75 species recorded.

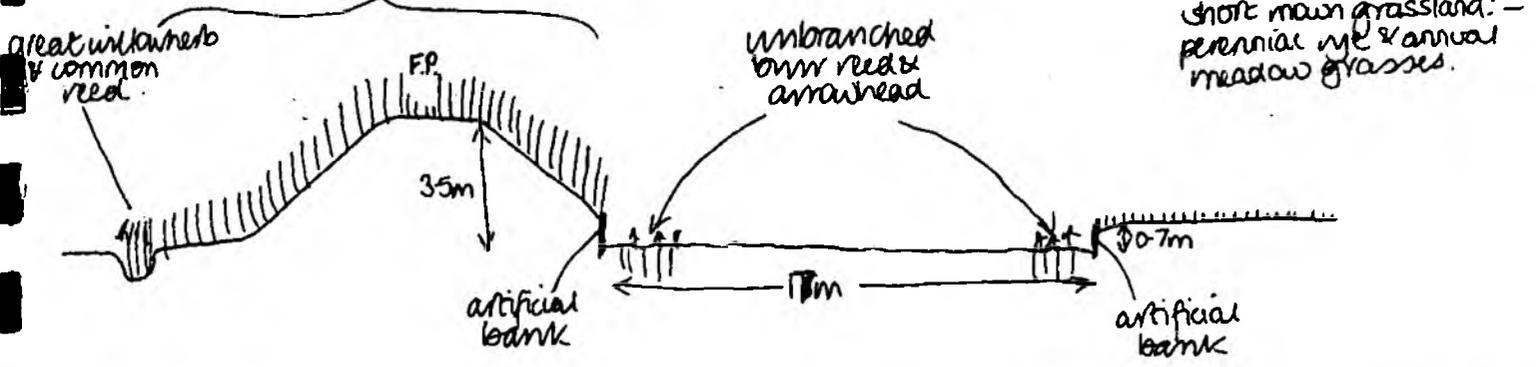
Breeding Birds

Fourteen species held a combined total of 18 territories. Above the bridge, the line of willows on the left bank held territories of Wren, Goldfinch, Great Tit, Chaffinch and Dunnocks, with a pair of Swallows nesting under the bridge. Gardens on the right and below the bridge on the left held Starling, Blue Tit, 2 Blackbird, 2 Song Thrush and 3 Wren territories, with those of Mallard and Moorhen in the channel and banks upstream of the bridge. A pair of Reed Warblers held territory in an adjoining reed choked drain upstream on the right bank.

Other species recorded but not shown to hold territories included Skylark, Meadow Pipit, Sedge Warbler, Magpie and Woodpigeon.



overgrown & unmanaged:-
false oat, field thistle, nettle,
cock's foot, rough meadow &
perennial rye grasses, hogweed



short mown grassland:-
perennial rye & annual
meadow grasses.

CCRM 930

Plant Communities

A fenland channel, with a floodbank on the right. The left bank is artificial. The left side land use is arable (cereals and past), with some pasture at the downstream end. The right side is also arable (cereals).

The left bank above the piling is mown like lawns with perennial rye grass and annual meadowgrass, plus some mature trees, mainly elder and willows. The fringe is absent in front of the artificial bank.

The right bank is overgrown, unmanaged and dominated by false oat, nettle, creeping thistle and cocksfoot, plus some patches of common reed, which is also present in the soak ditch along with great willowherb. The back slope is dominated by a thick, gappy hedge of willows, elder and hawthorn. The bank toe is piled, so there is no fringing vegetation.

The river is slow flowing and supports yellow water lily, unbranched bur-reed, arrowhead, Nuttall's pondweed, water starwort and rigid hornwort at 10% cover.

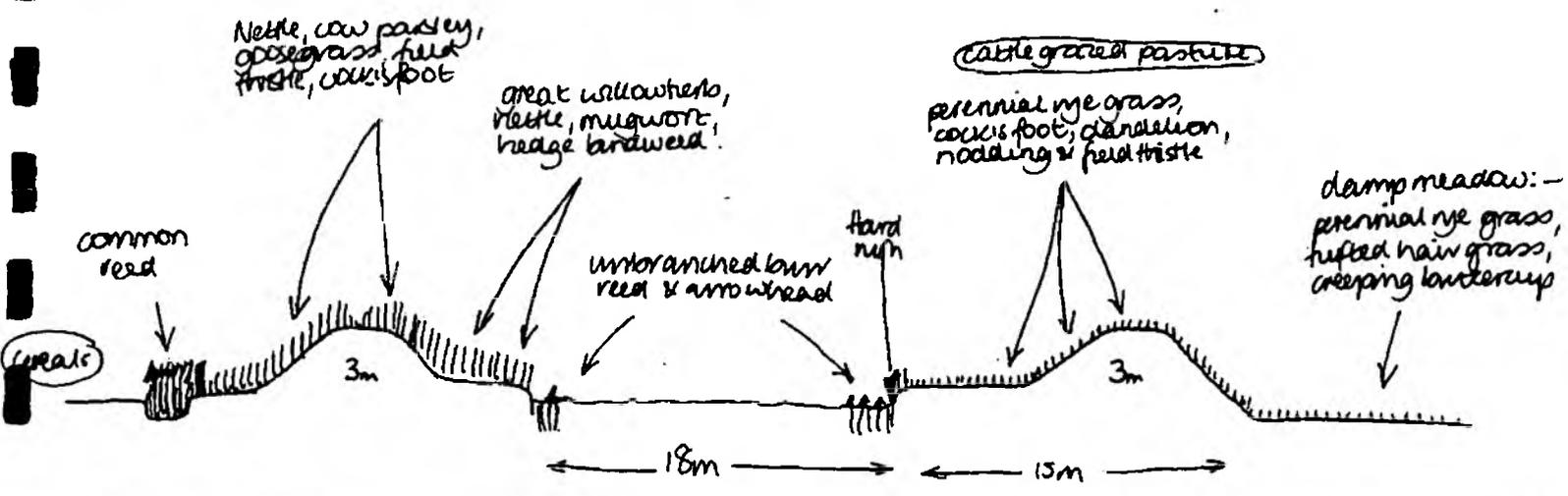
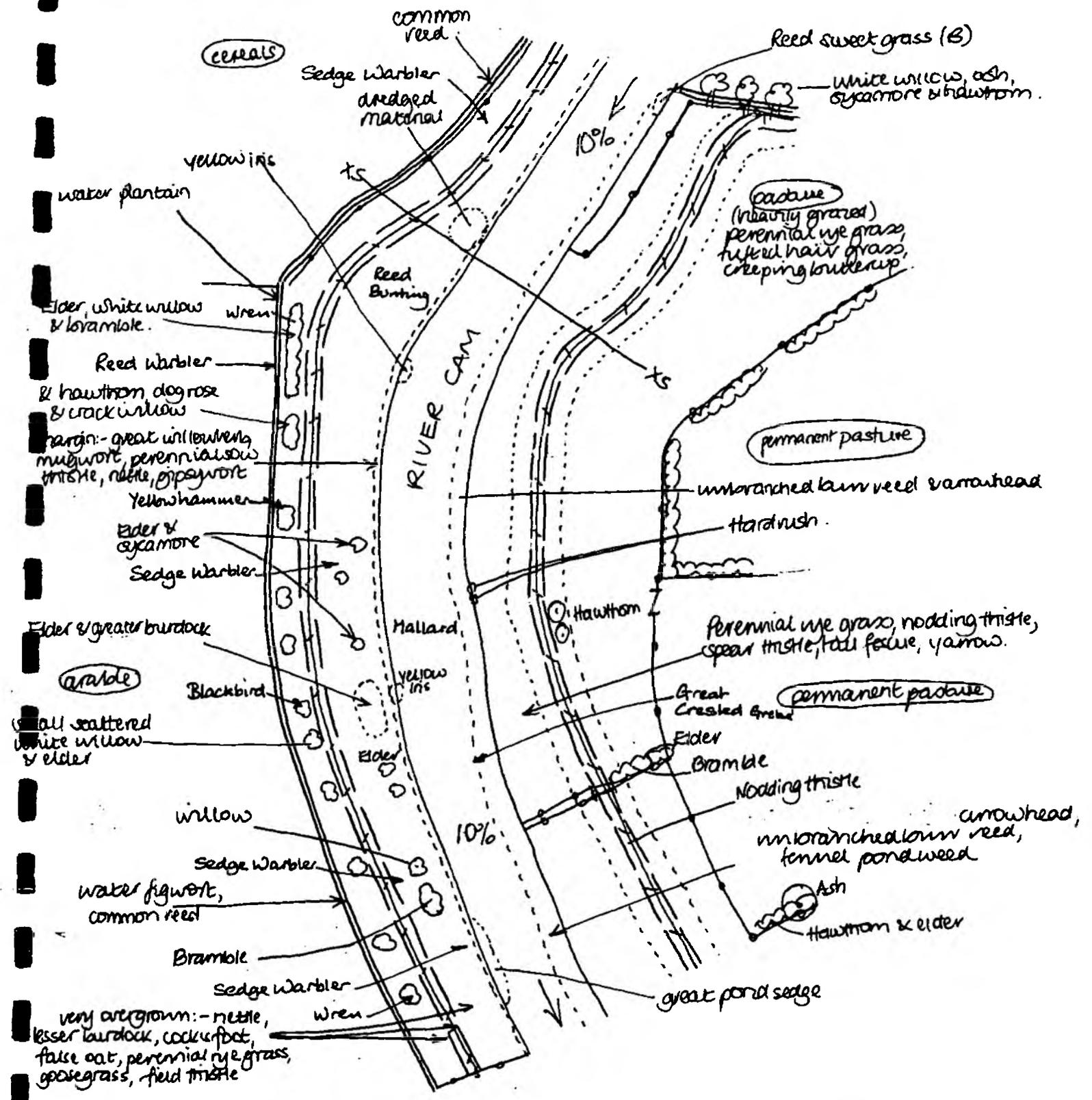
57 species recorded.

Breeding Birds

Six species held a combined total of seven territories. The unmanaged right bank held Reed Bunting and 2 Sedge Warbler territories, with those of Mallard and Moorhen centred on the channel and fringes. Scattered trees among the left bank caravan and boat parks held a pair each of Blackbirds and Blue Tits.

Other

Meadow Brown butterflies.



CCAN 037

Plant Communities

A fenland channel, with floodbank and berms. The left side land use is permanent pasture. The right side is arable (cereals).

The left bank is cattle grazed, with perennial rye grass, cocksfoot and thistles dominant, plus tufted hair grass and buttercups. There is no fringing vegetation other than one stand of reed sweet grass.

The right bank is unmanaged and overgrown, with nettle, cocksfoot, false oat and creeping thistle dominant, plus patches of burdock and scattered small elder and willow. Great willowherb, mugwort and hedge bindweed are dominant on the berm. The soak ditch contains some common reed and water figwort plus a patch of water plantain. The fringe consists of patches of yellow iris and one stand of greater pond sedge.

The river is slow flowing and supports unbranched bur-reed, arrowhead and fennel-leaved pondweed at 10% cover.

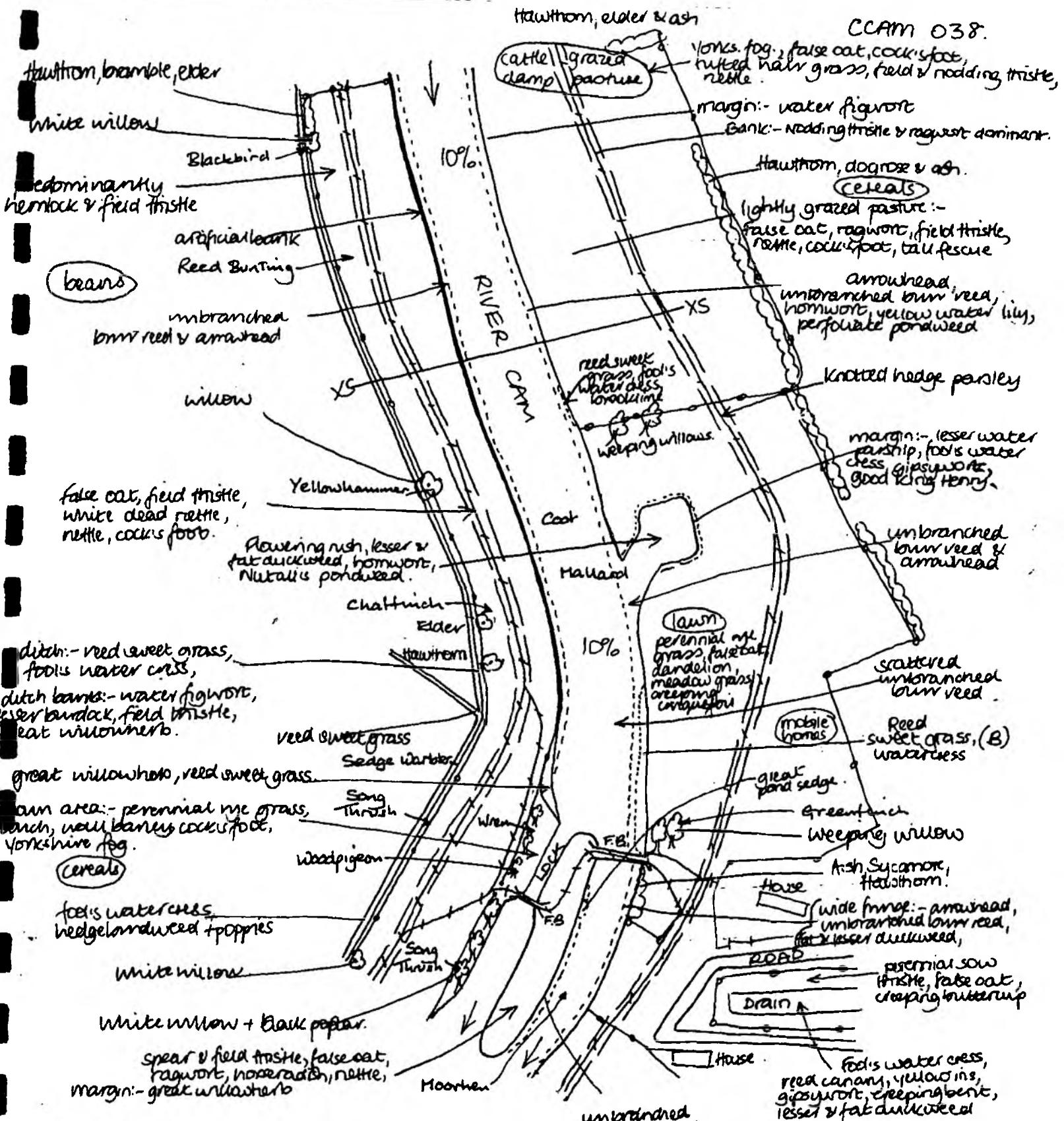
64 species recorded.

Breeding Birds

Eight species held a combined total of 12 territories. Tall herbs with bushes and scrub on the right bank supported Reed Bunting, Yellowhammer, Blackbird, 2 Wren and 4 Sedge Warbler territories, with a Reed Warbler territory in the soak drain and those of Mallard and Great Crested Grebe in the channel and fringes.

Other species recorded but not shown to hold territories included Yellow Wagtail and Whitethroat.

CCAM 038.



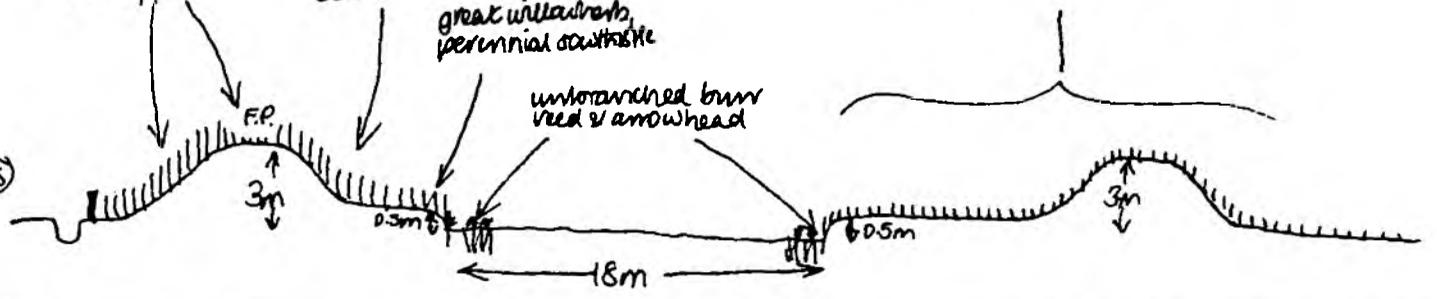
(once mown)
 false oat, field thistle, white dead nettle, nettle, cock's foot

ragwort, nettle, field thistle, false oat

great willow herb, perennial sowthistle

unbranched burr reed & arrowhead

Cattle grazed pasture
 false, ragwort, field thistle, cock's foot, nettle, tall fescue



CCNY 330

Plant Communities

A fenland channel with floodbanks and berms 2-20m wide. Downstream, the channel divides, with a lock on one side. The left side land use is arable (cereals) upstream, and houses and gardens downstream. The right side is arable (cereals and beans).

At the upstream end, the left bank is cattle grazed, with cocksfoot, false oat and thistles dominant, plus some tufted hair grass. Downstream, the bank is mown and dominated by perennial rye grass, meadowgrass and creeping cinquefoil. The fringe consists of large patches of reed sweet grass and watercress.

The right bank is dominated by coarse vegetation (once mown, but otherwise unmanaged) with false oat, cocksfoot, thistles and nettle dominant, plus patches of redshank and hemlock. The soak ditch contains reed sweet grass, fool's watercress and hedge bindweed. There is a line of willow and poplar along the bank of the lock, below which the bank is mown, with perennial rye grass dominant. The fringe consists of a patch of reed sweet grass.

The river is slow flowing, and supports perfoliate and Nuttall's pondweeds, hornwort, lesser and fat duckweeds, unbranched bur-reed, yellow water lily and arrowhead at 10% cover.

93 species recorded.

Breeding Birds

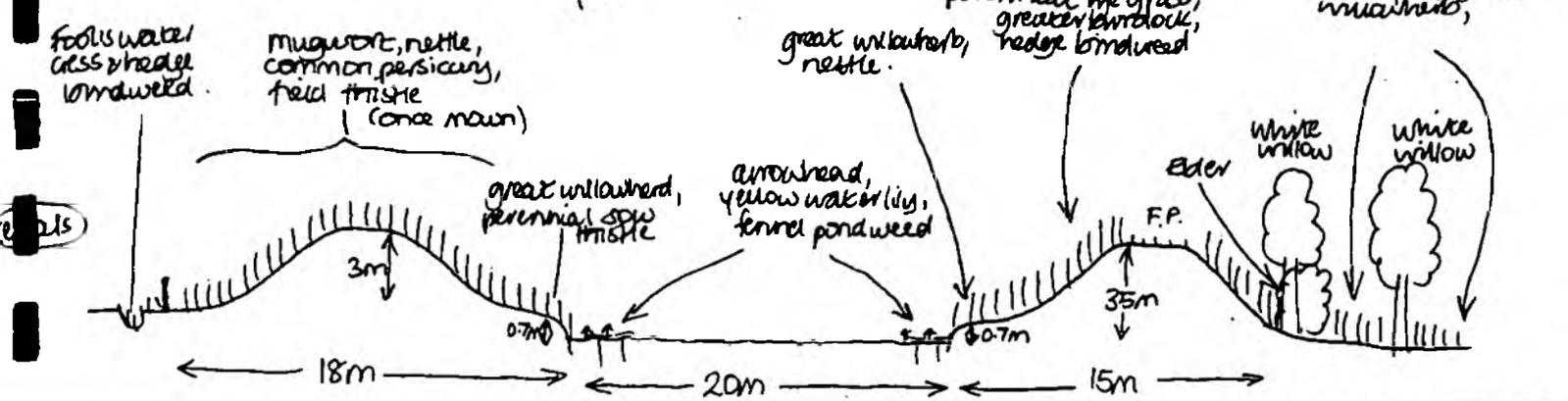
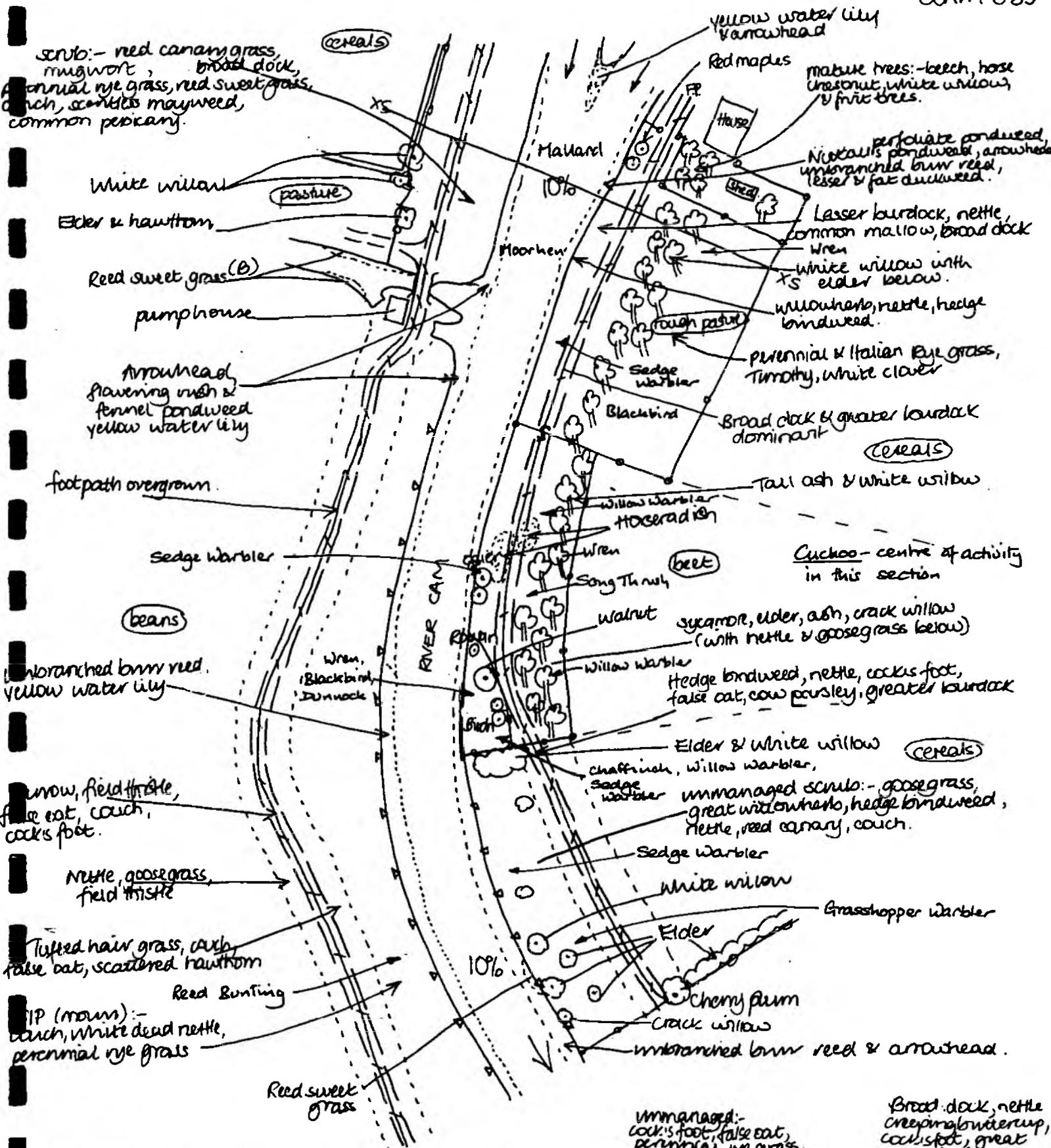
Eleven species held a combined total of 13 territories. Tall herbs and scattered bushes along the right bank and soak drain held territories of Chaffinch, Sedge Warbler, Reed Bunting, Blackbird, Yellowhammer and 2 Song Thrushes, with Wren and Woodpigeon territories in trees along the lock. Scrub and trees around the lock on the left bank held a Greenfinch territory, with those of Mallard, Coot and Moorhen centred on the channel.

Other species recorded but not shown to hold territories included Skylark, Yellow Wagtail, Whitethroat and Bullfinch.

Other

Small Tortoiseshell and Small White butterflies.
Blue Damsel fly.

scrub:- reed canary grass, mugwort, broad dock, perennial rye grass, reed sweet grass, couch, scattered mayweed, common periwinkle.



(c) pls

CCRM 809

Plant Communities

A lowland channel with floodable islands of 1-10m width. The left side land use is arable (cereals and beet), and is the right (cereals and beans).

The left bank is unmanaged and mainly overgrown, with false oat, cocksfoot, nettle and burdock dominant plus great willowherb and hedge bindweed on the berm. Willow, alder, ash and sycamore trees are dominant on the back slope in the upstream half, with nettle and goosegrass below. The fringe consists of a little reed sweet grass.

The right floodbank is overgrown with false oat, cocksfoot, couch, thistles and yarrow dominant and a few small hawthorns. The berm is managed as hay meadow with couch and perennial rye grass and some white deadnettle. Upstream of the channel inlet the bank is dominated by coarse vegetation (once mown) of reed canary grass, redshank and mugwort. The fringe consists of some patches of flowering rush.

The river is slow flowing and supports fennel-leaved, perfoliate and Nuttall's pondweeds, lesser and fat duckweeds, unbranched bur-reed, yellow water lily and arrowhead at 10% cover.

85 species recorded.

Breeding Birds

Twelve species held a combined total of 20 territories. Trees on the back of the left bank and a patch of scrub on the front slope in midsection, held territories of Chaffinch, Dunnock, Song Thrush, 2 Blackbirds, 3 Willow Warblers, 3 Sedge Warblers and 3 Wrens. The open right bank and lower left bank held Reed Bunting, Grasshopper Warbler and Sedge Warbler territories, and those of Mallard and Moorhen were in the channel around the inlet. This section also held the centre of a Cuckoo territory.

Other species recorded but not shown to hold territories included Meadow Pipit, Skylark and Tufted Duck.

Other

Gatekeeper and Small White butterflies.
Brown Hawker dragonfly.

CCAM 040

Plant Communities

A fenland channel, with floodbanks. The right bank has a wide berm (25m). The land use on both sides is arable (cereal and beet on the left, beans on the right).

The left bank is cattle grazed with false oat, cocksfoot, perennial rye grass and thistles dominant, with small scattered hawthorns on the floodbank. The ditches behind are varied with great willowherb, reed canary grass, reed sweet grass and branched bur-reed the most common species. The river margin has great willowherb, gipsywort, water figwort and some sedges. The fringe consists of patches of greater and lesser pond sedges.

The right floodbank is overgrown with false oat, creeping thistle and cocksfoot. The berm is managed as hay meadow, with couch and perennial rye grass dominant. The soak ditch contains great willowherb, false oat, hedge bindweed and water figwort. The rough river margin is dominated by great willowherb, thistles, docks and reed canary grass. There is a little fringing reed sweet grass and greater pond sedge.

The river is slow flowing and supports fennel-leaved pondweed, unbranched bur-reed, yellow water lily and arrowhead at 10% cover.

82 species recorded.

Breeding Birds

Four species held a single territory each. Bushes along the left bank soke drain held Wren and Yellowhammer territories, with a Reed Bunting territory on the open right bank and a Moorhen territory centred on the channel.

Other species recorded but not shown to hold territories included Skylark, Red-Legged Partridge and Pheasant.

Other

Gatekeeper, Meadow Brown, Common Blue and Small White butterflies.

ditch: - water cress, foals water cress, water plantain, great reed mace, branched burr reed, hedge bindweed, rush.

scattered Hawthorn, false oat, field thistle, red fescue, cocks foot, creeping cinquefoil, creeping bent, field bindweed, dandelion, angelica, bramble.

Cereals

Reed Bunting

scrap margin (1m)

great willowherb, false oat, perennial sow thistle, marsh woundwort, cow parsley, water flower, lesser pond sedge

Sedge Warbler

yellow water lily, branched burr reed, fenel pondweed

Improved meadow

couch, smooth meadow grass

bank: - field thistle, nettle, bramble

common reed

Yellowhammer, Wren

Improved hay meadow

couch, smooth meadow grass

flood bank unmanaged: - false oat, field thistle, cocks foot, field bindweed

great willowherb, false oat, perennial sow thistle, marsh woundwort

field thistle, false oat, cocks foot

unbranched burr reed, arrowhead, fenel pondweed

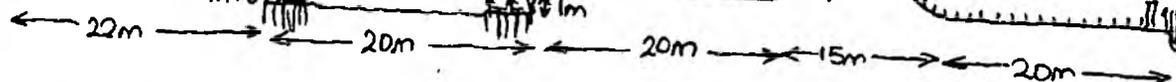
cow parsley, nettle, field thistle

cocks foot, false oat, perennial me grass, meadow leaver, nettle, field, rodding & spear thistles

reed canary & great willowherb

Cereals

Cereals



RIVER CAM

White willow

unbranched burr reed, arrowhead & fenel pondweed

great reed mace, common reed

margin undercut throughout

cow parsley, nettle, field thistle

Blackbird

White willow

great pond sedge

ditch: - hedge bindweed, false oat, reed canary, branched burr reed, great willowherb

Cereals

damp meadow

perennial me grass, cocks foot, couch, creeping bent, rough meadow grass, nettle, field & spear thistle, nettle

dog rose

Meadow Pipit

Cattle grazed

nettle, false oat, cocks foot, red & white clover, hebeard, rodding thistle, broad dock, smooth hawk's beard, yellow, marlow

marginal strip: - gipsywort, clustered dock, wintercress, creeping buttercup, lesser & fat duckweed

inner fringe: - scattered, great pond sedge, reed canary grass, marsh woundwort, branched burr reed, smooth & hard rush, lesser pond sedge, lesser & fat duckweed

unbranched burr reed, arrowhead, fenel pondweed, hornwort

Cattle grazed pasture

CCAM 041

Plant Communities

A fenland channel with floodbanks and berms of 10-20m width. The left side land use is arable (cereals), as is the right side (cereals).

The left bank is cattle grazed, with cocksfoot, false oat and perennial rye grass dominant, with yarrow and smooth hawksbeard on the floodbank. The soak ditch contains reed canary grass, branched bur-reed, great willowherb and hedge bindweed. The fringe consists of narrow patches of greater pond sedge.

The right berm is improved hay meadow, with couch and smooth meadowgrass dominant. The floodbank is overgrown and dominated by false oat, cocksfoot, red fescue and creeping cinquefoil, with scattered small hawthorns. The margin also has coarse vegetation - great willowherb, false oat and perennial sow thistle dominant. There is no fringing vegetation.

The river is slow flowing and supports fennel-leaved pondweed, lesser and fat duckweeds, hornwort, unbranched bur-reed, yellow water lily and arrowhead at 5-10% cover.

76 species recorded.

Breeding Birds

Six species held a single territory each. The open banks held territories of Meadow Pipit and Reed Bunting, with a pair of Sedge Warblers in the right soke dyke, Yellowhammer and Wren territories in the hedge along the soke drain downstream on this bank and a Blackbird territory in the white willow on the left bank soke drain.

Two Kingfishers 'piping' on June 13 almost certainly had young nearby, but the nest site was not known.

Other

Meadow and Wall Brown butterflies.