



# NAIRN DISTRICT TARGET NOTES 1993



## CONTENTS

Use **Edit** and **Find** to locate items quickly. This can be used to find individual maps, or grid references (if known), or page numbers, and to search for items such as particular species or places.

NH74NE	2	NH94NE	16
NH84NW	2	NH94SW	21
NH84NE	4	NH94SE	21
NH84SE	5	NH95NW	25
NH85NW	5	NH95NE	25
NH85NE	7	NH95SW	26
NH85SW	11	NH95SE	28
NH85SE	14	NH96SW	29
NH94NW	15		

IS - denotes target notes adjacent to Nairn District but within Inverness District.

MO - denotes target notes adjacent to Nairn District but within Moray District.

## **NH 74 NE (Produced 1993)**

NH797466 Map sheet: NH74NE

Semi-natural broadleaved woodland. Dominant: oak (*Quercus* sp.) Frequent; birch (*Betula* sp.), ash (*Fraxinus excelsior*). Enclosed. Regeneration ?

IS - NH757471 Map sheet: NH74NE

Wet pasture with diverse grassland including grass-of-parnassus (*Parnassia palustris*). The area is bounded by conifer plantations on each side of the improved/semi-improved fields.

IS - NH763471 Map sheet: NH74NE

Mature stands of Scots pine (*Pinus sylvestris*). These "Granny Pines" are found in a semi-improved grassland, which is enclosed and grazed by sheep. There are a few patches of soft rush (*Juncus effusus*), gorse (*Ulex europaeus*) and the occasional heath-spotted orchid (*Dactylorhiza maculata*).

IS - NH774495 Map sheet: NH74NE

Recently felled area of coniferous plantation. A few stands have been left. As the ground is wet, soft rush (*Juncus effusus*) has colonised. However, this area will probably be re-planted on.

IS - NH789491 Map sheet: NH74NE

Wet heath in a small clearing of Scots pine (*Pinus sylvestris*) plantation.

IS - NH797488 Map sheet: NH74NE

Linear strip of semi-natural broadleaved trees. Dominant: birch (*Betula* sp.). Frequent: rowan (*Sorbus aucuparia*), ash (*Fraxinus excelsior*), oak (*Quercus* sp.), elm (*Ulmus* sp.), and a few stands of Scots Pine (*Pinus sylvestris*). Enclosed. Regeneration ? Note: Some oaks have been planted.

IS - NH792491 Map sheet: NH74NE

Semi-natural broadleaved woodland, birch (*Betula* sp.) dominant. Ground: wet/marshy, with patches of soft rush (*Juncus effusus*), frequent Yorkshire fog (*Holcus lanatus*). Enclosed. Stock grazed. No regeneration.

## **NH 84 NW (Produced 1993)**

NH800497 Map sheet: NH84NW

This field is scheduled for a housing development.

NH820491      Map sheet: NH84NW

Semi-natural broadleaf woodland surrounded by conifer plantations on three sides. The ground is relatively marshy (there is a ditch with water running into the eastern end of the wood). Birch (*Betula* sp.) dominates, with frequent oak (*Quercus* sp.), rowan (*Sorbus aucuparia*) and honeysuckle (*Lonicera periclymenum*). Ground layer: Broom (*Sarothamnus* [*Cytisus*] *scoparius*), soft rush (*Juncus effusus*), bramble (*Rubus fruticosus*), foxglove (*Digitalis purpurea*), nettle (*Urtica dioica*) and wood rush (*Luzula sylvatica*).

NH823483      Map sheet: NH84NW

Dallaschyle Wood. Scots pine (*Pinus sylvestris*) plantation with some Larch (*Larix* sp.), Sitka and Norway spruce (*Picea* spp.).

NH824493      Map sheet: NH84NW

Semi-natural mixed woodland with a diverse understorey. Canopy: sycamore (*Acer pseudoplatanus*), birch (*Betula* sp.), Scots pine (*Pinus sylvestris*), larch (*Larix* sp.) and Douglas fir (*Pseudotsuga menziesii*). Understorey: broom (*Sarothamnus* [*Cytisus*] *scoparius*), nettle (*Urtica dioica*), bluebell (*Endymion non-scriptus*), wood rush (*Luzula sylvatica*), bracken (*Pteridium aquilinum*), cleavers (*Galium aparine*), and wavy hair-grass (*Deschampsia flexuosa*).

NH828476      Map sheet: NH84NW

Dun Even fort. Scots pine (*Pinus sylvestris*) plantation with dense blackthorn (*Prunus spinosa*) scrub around the trig point and fort. This represents the largest area of blackthorn recorded in Nairn District.

NH835485      Map sheet: NH84NW

This is a broadleaf tree nursery.

NH838480      Map sheet: NH84NW

This is a beech (*Fagus sylvatica*) nursery.

NH839480      Map sheet: NH84NW

Mixed semi-natural woodland. Canopy: oak (*Quercus* sp.), elm (*Ulmus* sp.), sycamore (*Acer pseudoplatanus*) and larch (*Larix* sp.). The oak and sycamore are regenerating. As the latter normally out-competes the former the woodland may in time become dominated by sycamore, a species which supports far fewer invertebrate species than oak.

NH842464      Map sheet: NH84NW

Interesting wet modified bog with wet heath. Relatively high species richness.

NH845489 Map sheet: NH84NW

Cawdor Wood - Mixed semi-natural woodland. Most of the trees in this wood have been planted but there remain some indications that parts of this wood were once natural. Management has produced a diverse and mature woodland with varied canopy and ground flora and dead wood in places (important for invertebrates). Tree species include exotic conifers such as noble fir (*Abies procera*), giant sequoia [Wellingtonia] (*Sequoiadendron giganteum*), larch (*Larix* sp.), Norway spruce (*Picea abies*), and Douglas fir (*Pseudotsuga menziesii*), plus natives such as oak (*Quercus* sp.), beech (*Fagus sylvatica*), Scots pine (*Pinus sylvestris*), and birch (*Betula* sp.). There is an understorey of rhododendron in places. Ground layer includes wood rush (*Luzula sylvatica*) and sometimes extensive bracken (*Pteridium aquilinum*).

## **NH 84 NE (Produced 1993)**

NH851482 Map sheet: NH84NE

Cawdor Wood east. "Policy" woodland of Cawdor Castle. Mixed semi-natural woodland with discreet stands of both broadleaves (especially beech (*Fagus sylvatica*)) and conifers (See also NH845485). Internal boundaries difficult to map. The woodland contains a number of walks open to visitors of the castle. A mature woodland, regeneration hindered by deer and a closed canopy in many areas. Relatively high wildlife and amenity value.

NH870480 Map sheet: NH84NE

Dense, mature juniper (*Juniperus communis*) scrub within grassland ranging from good semi-improved to poor semi-improved - some mat grass (*Nardus stricta*) dominated, some Yorkshire fog (*Holcus lanatus*) and other species. Grazed short by rabbits in many places. Also some marshy grassland. Internal boundaries difficult to map.

NH871487 Map sheet: NH84NE

Small pond/marshy area with willows (*Salix* sp.).

NH874479 Map sheet: NH84NE

Small area of Sphagnum bog with heather (*Calluna vulgaris*) and a pond. Old peat cuttings. The area shows signs of tree regeneration - Scots pine (*Pinus sylvestris*) and birch (*Betula* sp.).

NH884494 Map sheet: NH84NE

Wet hollow dominated by soft rush (*Juncus effusus*) - probably a former pond now filled in through natural succession. (Species richness relatively high.)

NH886490 Map sheet: NH84NE

Small pond with yellow iris (*Iris pseudacorus*), bogbean (*Menyanthes trifoliata*) and water lilies. Fauna includes newts, frogs and toads.

NH892468 Map sheet: NH84NE

Relatively unmodified M18 *Erica tetralix*-*Sphagnum papillosum* blanket mire (NVC). Relatively species rich.

NH894452 Map sheet: NH84NE

Wet heath/acid grassland. Supports a range of common heath species including bog asphodel (*Narthecium ossifragum*), but heavily grazed and poached by cattle.

NH894469 Map sheet: NH84NE

Complex mosaic of wet heath/acid grassland, good semi-improved grassland and gorse (*Ulex europaeus*) with scattered birch (*Betula* sp.). Some parts relatively dry. Internal boundaries difficult to map.

NH895484 Map sheet: NH84NE

Area of "swamp" dominated by large sedge (*Carex* sp.) (probably *Carex paniculata*), fringed by willow (*Salix* sp.) and alder (*Alnus glutinosa*) in places. The site is dammed to the west - formerly a pond which has now filled in.

## **NH 84 SE (Produced 1993)**

NH890404 Map sheet: NH84SE

Area quite heavily grazed by sheep. No signs of any tree regeneration whatsoever. Without a change in management strategy the remaining pockets of woodland will become much reduced. NB: AS MOST OF THIS FIVE by FIVE KILOMETRES SQUARE IS UPLAND, ONLY THE LOWER LYING PARTS HAVE BEEN INCLUDED IN THE PHASE 1 HABITAT SURVEY OF NAIRN DISTRICT.

## **NH 85 NW (Produced 1993)**

NH820553 Map sheet: NH85NW

Wetland (former pond) with willow (*Salix* sp.) and gorse (*Ulex europaeus*) scrub backed by birch (*Betula* sp.), but closely bordered by arable land.

NH822575 Map sheet: NH85NW

Dune scrub, dune heath and dune grassland mosaic with heather (*Calluna vulgaris*), gorse (*Ulex europaeus*), crowberry (*Empetrum nigrum*) and marram grass (*Ammophila arenaria*).

NH828563 Map sheet: NH85NW

Mosaic of poor semi-improved grassland and soft rush (*Juncus effusus*) dominated marshy-grassland heavily grazed by sheep. Species richness very low.

NH830567     Map sheet: NH85NW

Stand of willow (*Salix* sp.) with scattered birch (*Betula* sp.) and Scots pine (*Pinus sylvestris*) with marshy grassland with soft rush (*Juncus effusus*) and some dry heath/grassland mosaic. Some of the area appears to have been a pond at one time. Frog spawn was found in a ditch.

NH830572     Map sheet: NH85NW

A single juniper (*Juniperus communis*) - a locally under-represented species.

NH839551     Map sheet: NH85NW

Recently planted broadleaves in marshy grassland. Some conifers planted south of drainage ditch. Several pools present - appear permanent but may be partly seasonal.

NH845563     Map sheet: NH85NW

Short-eared owl (*Asio flammeus*) sighted March 1992.

NH849552     Map sheet: NH85NW

Scots pine (*Pinus sylvestris*) woodland of plantation origin but with ground flora comparable with native pinewood. Classified as semi-natural as "plantation" would not adequately describe this woodland.

IS - NH803566     Map sheet: NH85NW

Scots pine (*Pinus sylvestris*) plantation, but 100% ground cover of heather (*Calluna vulgaris*), the moss *Hylocomium splendens* and other bryophytes. Occasional clumps of birch (*Betula* sp.) and occasionally holly (*Ilex aquifolium*). Becoming semi-natural but still at an intermediate stage.

IS - NH807570     Map sheet: NH85NW

Cock's foot (*Dactylis glomerata*) semi-improved grassland bordered by gorse (*Ulex europaeus*) and several mature Scots pines (*Pinus sylvestris*).

IS - NH811582     Map sheet: NH85NW

"Grey dune" with dune grassland dominated by marram grass (*Ammophila arenaria*) in many places with a range of common grasses. English stonecrop (*Sedum anglicum*) found, but visited in March therefore full botanical interest probably not visible. Whole area grazed by sheep, maintaining grassland. (Whether or not this is near optimum for species richness is unknown.) The whole spit area suffers from a serious litter problem - blown/washed from elsewhere - some could be a threat to wildlife.

IS - NH812558     Map sheet: NH85NW

Cock's foot (*Dactylis glomerata*) grassland with abundant *Hylocomium splendens* (moss). Apparently maintained by limited grazing. Some heather (*Calluna vulgaris*) present which could spread if grazing reduced.

IS - NH814567      Map sheet: NH85NW

Abandoned fields with cock's foot (*Dactylis glomerata*) dominant. Areas of soft rush (*Juncus effusus*), patches of gorse (*Ulex europaeus*) and broom (*Sarothamnus* [*Cytisus*] *scoparius*) scrub. Sandy soil - some area marshy with small pools.

IS - NH816555      Map sheet: NH85NW

Small pond/wetland with willow (*Salix caprea*) and soft rush (*Juncus effusus*).

IS - NH816578      Map sheet: NH85NW

Dune grassland with areas of heath. Some patches of *Cladonia* sp. (lichen) and scattered scrub (both gorse (*Ulex europaeus*) and broom (*Sarothamnus* [*Cytisus*] *scoparius*)). Some crowberry (*Empetrum nigrum*).

## **NH 85 NE (Produced 1993)**

NH855555      Map sheet: NH85NE

Gardens.

NH855562      Map sheet: NH85NE

Mature tall elder berry (*Sambucus nigra*). Fenced and grazed.

NH856564      Map sheet: NH85NE

Scots pine (*Pinus sylvestris*) plantation. Partly fenced golf tee in plantation (not in use). Abundant dead wood. Overgrown with gorse (*Ulex europaeus*) and bramble (*Rubus fruticosus*). Good potential to become semi-natural if managed properly. Is already a good habitat for birds.

NH861553      Map sheet: NH85NE

A Scots pine (*Pinus sylvestris*) plantation that has matured into a semi-natural woodland. As such the decision to map it as semi-natural was based on the ground flora. (This is just a small corner of an extensive area of Scots pine woodland.) Shrub layer: scattered broom (*Sarothamnus* [*Cytisus*] *scoparius*), raspberry (*Rubus idaeus*). Ground layer: bell heather (*Erica cinerea*) is abundant, Yorkshire fog (*Holcus lanatus*), plus various moss species. Disturbance from walkers. This woodland has been thinned due to storm damage.

NH862565      Map sheet: NH85NE

Dense area of very young sycamore (*Acer pseudoplatanus*) dominated woodland. A thick scrub of broom (*Sarothamnus* [*Cytisus*] *scoparius*), elderberry (*Sambucus nigra*) and honeysuckle (*Lonicera periclymenum*) found throughout. Enclosed (a Scots pine plantation runs parallel to this).

NH863554 Map sheet: NH85NE

Rough area of semi-improved tussocky grassland. Gorse (*Ulex europaeus*) and broom (*Sarothamnus* [*Cytisus*] *scoparius*) are abundant. This area also contains planted broadleaves.

NH864562 Map sheet: NH85NE

Small improved fields that are bordered by a variety of tree species. Dominant: Scots pine (*Pinus sylvestris*), birch (*Betula* sp.), sycamore (*Acer pseudoplatanus*), beech (*Fagus sylvatica*) and exotic pines. There is also a beech hedge. Gorse (*Ulex europaeus*) and broom (*Sarothamnus* [*Cytisus*] *scoparius*) are abundant.

NH864564 Map sheet: NH85NE

Small pocket of semi-natural broadleaf woodland. Alder (*Alnus glutinosa*), willow (*Salix* sp.), and sycamore (*Acer pseudoplatanus*). Ground flora is poor due to grazing from ponies. Marsh marigold (*Caltha palustris*) is frequent beside the burn. Enclosed.

NH866553 Map sheet: NH85NE

Mixed semi-natural woodland, in private grounds. Mature stands of Scots pine (*Pinus sylvestris*) are abundant. Birch (*Betula* sp.), sycamore (*Acer pseudoplatanus*), willow (*Salix* sp.), beech (*Fagus sylvatica*), cypress (*Cupressus* sp.), cherry (*Prunus* sp.) of varying age are frequent. Shrub layer: scattered Rhododendron (*Rhododendron ponticum*), broom (*Sarothamnus* [*Cytisus*] *scoparius*), and currant (*Ribes* sp.). Ground flora: patchy areas of heather (*Calluna vulgaris*), and bell heather (*Erica cinerea*). This area is enclosed.

NH866564 Map sheet: NH85NE

Linear strip of semi-improved grassland and mixed trees bordering an improved field. Supports mature stands of Scots pine (*Pinus sylvestris*), but these are being replaced by ash (*Fraxinus excelsior*) and sycamore (*Acer pseudoplatanus*) (both of which are regenerating). Scattered scrub layer of gorse (*Ulex europaeus*), broom (*Sarothamnus* [*Cytisus*] *scoparius*), and honeysuckle (*Lonicera periclymenum*). Ground flora: tussocky grass - tufted hair-grass (*Deschampsia cespitosa*) and cock's foot (*Dactylis glomerata*). Enclosed.

NH869565 Map sheet: NH85NE

Scots pine (*Pinus sylvestris*) plantation. Western hemlock (*Tsuga heterophylla*) scattered throughout. Beech (*Fagus sylvatica*) and sycamore (*Acer pseudoplatanus*) border this plantation along with birch (*Betula* sp.). All these trees are regenerating. Shrub layer: poor, some honeysuckle (*Lonicera periclymenum*). Ground layer: poor. Enclosed.

NH869568 Map sheet: NH85NE

This group of three ponds is now a decorative feature of a Tulloch Housing development, called "The Ponds". The middle pond has been partly filled in (eventually it will be filled completely). The banks of the other small pond have been partly cleared and gardens now back onto it. The largest pond (which was once a quarry) has yet to be touched. Emergent vegetation: bulrush (*Schoenoplectus lacustris*). Bank-side vegetation: gorse (*Ulex europaeus*),



raspberry (*Rubus idaeus*) and willow (*Salix* sp.). Rush (*Juncus* sp.) and foxglove (*Digitalis purpurea*) are common throughout.

NH870558     Map sheet: NH85NE

A Scots pine (*Pinus sylvestris*) plantation that has matured into a semi-natural woodland. As such the decision to map it as semi-natural was based on the ground flora. Shrub layer dominated by gorse (*Ulex europaeus*) in the south of the woods. Ground flora good, with scattered areas of bell heather (*Erica cinerea*). Clumped distribution of creeping lady's tresses (*Goodyera repens*) at north end in more open/less scrubby areas - favours short moss turf of *Rhytidiadelphus triquetrus* with wavy hair-grass (*Deschampsia flexuosa*). Despite being of plantation origin the woodland can be classified as a W18a - *Pinus sylvestris*-*Hylocomium splendens* woodland, *Erica cinerea*-*Goodyera repens* sub-community (NVC).

NH871565     Map sheet: NH85NE

Small area of scrub with scattered broadleaves situated next to a linear strip of Scots pine (*Pinus sylvestris*) plantation. Dominant broadleaves: sycamore (*Acer pseudoplatanus*), elm (*Ulmus* sp.) and beech (*Fagus sylvatica*). These broadleaves are all regenerating. Dominant scrub: raspberry (*Rubus idaeus*). Unenclosed.

NH872569     Map sheet: NH85NE

Ornamental pond in the grounds of Golf View Hotel. Emergent vegetation dominated by white water-lily ((*Sarothamnus* [*Cytisus*] *scoparius*)). Bank-side vegetation dominated by gorse (*Ulex europaeus*) and ivy (*Hedera helix*). Frequent: rush (*Juncus* sp.) and willow (*Salix* sp.). Enclosed (fence).

NH874553     Map sheet: NH85NE

Linear strip of mature semi-natural Scots pine (*Pinus sylvestris*). Ground flora, poor: mown grass.

NH879569     Map sheet: NH85NE

Westlinks Park and putting green. contains mature stands of sycamore (*Acer pseudoplatanus*) which are actively managed by Nairn District Council (i.e. pollarding-removal of dead/dangerous branches). Linear strips of elderberry (*Sambucus nigra*), gorse (*Ulex europaeus*) and hawthorn (*Crataegus monogyna*) scrub.

NH880550     Map sheet: NH85NE

Firhall House (private grounds). Semi-natural broadleaf woodland. Dominant: oak (*Quercus* sp.), sycamore (*Acer pseudoplatanus*), ash (*Fraxinus excelsior*). Frequent: beech (*Fagus sylvatica*), elm (*Ulmus* sp.). The elms and sycamore are regenerating. Also contains a few Scots pine (*Pinus sylvestris*). Shrub layer: poor - yew (*Taxus baccata*), hawthorn (*Crataegus monogyna*) and elderberry (*Sambucus nigra*). The yews and hawthorns are both very infrequent. The ground layer is dominated by ivy (*Hedera helix*) and periwinkle (*Vinca* sp.). Mixed maturity. Enclosed. No grazing. No lying dead wood.

NH886563 Map sheet: NH85NE

Broad Hill. Scrub covered embankment - broom (*Sarothamnus* [*Cytisus*] *scoparius*) and gorse (*Ulex europaeus*). Scattered stands of rowan (*Sorbus aucuparia*), hawthorn (*Crataegus monogyna*) and beech (*Fagus sylvatica*). Too small an area to map.

NH888570 Map sheet: NH85NE

The area marked on the Ordnance Survey map as "Mud", has now been filled in and is now used as an amenity car park.

NH891560 Map sheet: NH85NE

This area (marked down as Balmakeith Park) is being developed as a housing estate.

NH895572 Map sheet: NH85NE

Linear strip of semi-natural broadleaf woodland, with two man-made drains running into, and out of, a small pond. Dominant trees: willow (*Salix* sp.), alder (*Alnus glutinosa*), birch (*Betula* sp.) and elm (*Ulmus* sp.). Ground layer is wet tussocky grassland. Frequent sp.: soft rush (*Juncus effusus*), thistle (*Cirsium* sp.). Scattered areas of scrub: gorse (*Ulex europaeus*), elder (*Sambucus nigra*) and broom (*Sarothamnus* [*Cytisus*] *scoparius*). Various moss sp. Dead standing wood. Planted conifers. Around the edges of this woodland are patches of heather (*Calluna vulgaris*). The pond and drains contain pondweed (*Potamogeton* sp.) and common reedmace (*Typha latifolia*) is frequent.

NH897563 Map sheet: NH85NE

Established industrial estate with built areas surrounded by amenity-like grassland. Precise mapping difficult.

NH897574 Map sheet: NH85NE

Nairn District Council are undertaking dune planting to reduce erosion and stabilise shifting dunes. Enclosed.

NH898571 Map sheet: NH85NE

Kingsteps Quarry. Long disused (Nairn District Council use a small part of the east end). Elderberry (*Sambucus nigra*) and hawthorn (*Crataegus monogyna*) are well established, with scattered stands of elm (*Ulmus* sp.), sycamore (*Acer pseudoplatanus*) and willow (*Salix* sp.). Broom (*Sarothamnus* [*Cytisus*] *scoparius*) and gorse (*Ulex europaeus*) are frequent. Ground flora: tussocky grass - tufted hair-grass (*Deschampsia cespitosa*) dominant. Supports waste ground species including bedstraw (*Galium* sp.) and ragwort (*Senecio* sp.). Disturbed area with discarded rubbish and dumped cars. Derelict shed etc. More detailed survey required and conservation work needed. Wildlife potential appears high (there are signs of foxes and roe deer).

NH899573 Map sheet: NH85NE

Pond, possibly a flooded quarry, with wooded edges. Mature willow (*Salix* sp.) dominates with frequent birch (*Betula* sp.). Ground flora - wet tussocky grasslands dominated by tufted hair-grass (*Deschampsia cespitosa*), with frequent black (common) sedge (*Carex nigra*), dog rose (*Rosa canina*) and bramble (*Rubus fruticosus*). Scattered stands of ground elder (*Aegopodium podagraria*) and gorse (*Ulex europaeus*). Mallard duck, roe deer and pheasants present.

## **NH 85 SW (Produced 1993)**

NH808504 Map sheet: NH85SW

Scots pine (*Pinus sylvestris*) plantation with felled Douglas fir (*Pseudotsuga menziesii*). The *P. menziesii* had been regenerating. Also some regenerating *P. sylvestris* had been felled.

NH815507 Map sheet: NH85SW

Deciduous woodland bordering a lodgepole pine (*Pinus contorta*) plantation. Birch (*Betula* sp.) is dominant and rowan (*Sorbus aucuparia*) is frequent. The scrub layer includes broom (*Sarothamnus* [*Cytisus*] *scoparius*), bramble (*Rubus fruticosus*) and bracken (*Pteridium aquilinum*).

NH817515 Map sheet: NH85SW

Semi-natural birch (*Betula* sp.). woodland, with water lying in the hollows. Species poor ground flora, but plenty of lying dead wood.

NH818504 Map sheet: NH85SW

Semi-natural mixed woodland on NE side of the road. Yew (*Taxus baccata*) dominant. There are also some birch (*Betula* sp.), Scots pine (*Pinus sylvestris*) (with regeneration), elm (*Ulmus* sp.), sycamore (*Acer pseudoplatanus*), rowan (*Sorbus aucuparia*), spruce (*Picea* sp.) and beech (*Fagus sylvatica*). There is abundant dead wood. Ground layer contains broom (*Sarothamnus* [*Cytisus*] *scoparius*) and lesser celandine (*Ranunculus ficaria*).

NH825513 Map sheet: NH85SW

Scots pine (*Pinus sylvestris*) plantation bordered on all sides by a strip of birch (*Betula* sp.) and willow (*Salix* sp.). On the south side there is also a strip of larch (*Larix* sp.) between the conifers and broad-leaves. There are also species poor pools in the broadleaved strip.

NH832531 Map sheet: NH85SW

Extensive linear strip of scattered mature birch (*Betula* sp.) dominated woodland. Also present:- Mature Scots pine (*Pinus sylvestris*), hawthorn (*Crataegus monogyna*) and juniper (*Juniperus communis*). These species are situated on improved grassland which is heavily grazed. No regeneration.

NH832549 Map sheet: NH85SW

Broadleaved plantation. Most species still in protective tubes. Species include: sycamore (*Acer pseudoplatanus*), hazel (*Corylus avellana*) and birch (*Betula* sp.), with a border of hawthorn (*Crataegus monogyna*).

NH834531 Map sheet: NH85SW

Loch of the Clans - This Loch contains an extensive area of willow (*Salix* sp.) carr and reedmace (*Typha latifolia*), with soft rush (*Juncus effusus*) and bottle sedge (*Carex rostrata*). Common duckweed (*Lemna minor*) is also present. This Loch is extensive, and a good bird habitat.

NH838544 Map sheet: NH85SW

Scots pine (*Pinus sylvestris*) plantation. These trees are all mature and the canopy is quite open - thinning is evident. The ground flora is mostly grassy. However on the east side, patches of *Sphagnum* sp. and heather (*Calluna vulgaris*) are occasional, along with *Pseudoscleropodium purum* and *Hylocomium splendens* (mosses). There is no shrub layer. Around the woodland edges broom (*Sarothamnus* [*Cytisus*] *scoparius*), gorse (*Ulex europaeus*) and thin stands of birch (*Betula* sp.) are frequent. No regeneration. Lying dead wood is abundant.

Faunal interest:- roe deer were sighted. Evidence of red squirrel- dreys, stripped cones. Evidence of foxes- tracks, droppings, food remains and one earth was found.

NH841506 Map sheet: NH85SW

Bog of Cawdor. This consists of a burn running through a pool. There is a small plantation of elderberry (*Sambucus nigra*), with willow (*Salix* sp.) also present. Broom (*Sarothamnus* [*Cytisus*] *scoparius*) found beside the road.

NH841547 Map sheet: NH85SW

Large area of broom (*Sarothamnus* [*Cytisus*] *scoparius*) dominated dense scrub with scattered stands of birch (*Betula* sp.) around the border. Broadleaves have been planted throughout the scrub and they are still in their protective tubes. There is a network of roads/dirt tracks and clearances throughout the scrub for the purpose of storing recently felled timber.

NH843542 Map sheet: NH85SW

Large pond which appears to be seasonal. It is drying up and receding, leaving behind small ponds/pools, which contain numerous clumps of frog spawn.

VEGETATION:- Young saplings of birch (*Betula* sp.) and willow (*Salix* sp.) are numerous between the smallest pond and the largest. These saplings probably originate from the small pocket of birch woodland in the corner. The ground flora between and around the ponds is mostly improved grassland (grazed by ponies) but with cross-leaved heath (*Erica tetralix*) frequent. Bryophytes (mosses) are numerous here too, including *Sphagnum* sp..

NH844510 Map sheet: NH85SW

A mixed woodland with mature Scots pine (*Pinus sylvestris*) dominant. Some *P. sylvestris* has been recently felled. There are also willows (*Salix* sp.), alder (*Alnus glutinosa*), larch (*Larix* sp.), ash (*Fraxinus excelsior*), oak (*Quercus* sp.), beech (*Fagus sylvatica*) and elderberry (*Sambucus nigra*) which are all regenerating. There is also mature sycamore (*Acer pseudoplatanus*). The understorey consists of gorse (*Ulex europaeus*), broom (*Sarothamnus* [*Cytisus*] *scoparius*), wood rush (*Luzula sylvatica*), soft rush (*Juncus effusus*) and occasional bracken (*Pteridium aquilinum*). There is a plantation of Douglas fir (*Pseudotsuga menziesii*) in the middle of this woodland.

NH844533 Map sheet: NH85SW

Kildrummie Kames. (Ridges of sand and gravel deposited by glacial meltwater into crevasses. A geological Site of Special Scientific Interest.) Kildrummie Kames consist of a series of east-west ridges covered in dense gorse (*Ulex europaeus*). These are separated by grazing pasture and boggy areas/pools. The boggy areas are mostly marshy grassland dominated by soft rush (*Juncus effusus*). The wet area at NH846535 is different, with Sphagnum moss dominant. These boggy areas are seasonally flooded. There are isolated pockets of birch (*Betula* sp.) throughout. Juniper (*Juniperus communis*) occurs very occasionally. The east corner is owned by Easter Lochend, Balcroy, Nairn IV12 5NX. The rest is owned by Karlavok Estates.

NH847519 Map sheet: NH85SW

A semi-natural broadleaved woodland containing willow (*Salix* sp.), beech (*Fagus sylvatica*), alder (*Alnus glutinosa*), birch (*Betula* sp.), sycamore (*Acer pseudoplatanus*) and rowan (*Sorbus aucuparia*), which are all regenerating. There is lying dead wood. The understorey consists of broom (*Sarothamnus* [*Cytisus*] *scoparius*) and gorse (*Ulex europaeus*). Alder (*Alnus glutinosa*) is dominant beside the river.

IS - NH803545 Map sheet: NH85SW

Smithstown Wood - Scots pine (*Pinus sylvestris*) plantation (mature). Ground flora poor: very grassy with patches of the moss *Rhytidiadelphus squarrosus*. Broom (*Sarothamnus* [*Cytisus*] *scoparius*) sparse throughout. Also occasional rowan (*Sorbus aucuparia*) (sapling) and holly (*Ilex aquifolium*).

IS - NH803517 Map sheet: NH85SW

Plantation of Scots pine (*Pinus sylvestris*), now semi-natural with mature Scots pine and a ground flora of the moss *Hylocomium splendens* and heather (*Calluna vulgaris*).

## **NH 85 SE (Produced 1993)**

NH851523 Map sheet: NH85SE

Regeneration of alder (*Alnus glutinosa*) and willow (*Salix* sp.).

NH851535 Map sheet: NH85SE

"Kildrummie Kames" a glacial landform of ridges with dense gorse scrub with troughs between of both grazed and marshy grassland. (See also NH845534).

NH855511 Map sheet: NH85SE

Old airfield taxi-ways dug up and removed, now arable farmland.

NH855526 Map sheet: NH85SE

Regeneration of birch (*Betula* sp.), alder (*Alnus glutinosa*) and willow (*Salix* sp.). Also found water avens (*Geum rivale*).

NH862509 Map sheet: NH85SE

Wall but now has new fence and hawthorn (*Crataegus monogyna*) hedge, also newly planted birch (*Betula* sp.).

NH874548 Map sheet: NH85SE

Mixed plantation very recently planted. However conifers are very stressed and therefore may not survive.

NH878543 Map sheet: NH85SE

Mixed semi natural woodland corridor, dominant species alder (*Alnus glutinosa*). Extensive ground cover of opposite leaved golden saxifrage (*Saxifraga oppositifolia*) and the very infrequent occurrence of feverfew (*Chrysanthemum parthenium*).

NH888520 Map sheet: NH85SE

Small island in reservoir with Scots pine (*Pinus sylvestris*) and Rhododendron.

## NH 94 NW (Produced 1993)

NH915479 Map sheet: NH94NW

What was pond is now Scots pine (*Pinus sylvestris*) woodland, growing on grassland mosaic with *Sphagnum* moss, tormentil (*Potentilla erecta*), heath spotted orchid (*Dactylorhiza maculata*), cross leaved heath (*Erica tetralix*).

NH920456 Map sheet: NH94NW

Peat cutting area. Whole area scarified very recently & planted with Scots pine (*Pinus sylvestris*).

NH922458 Map sheet: NH94NW

Heath spotted orchid (*Dactylorhiza maculata*) and marsh violet (*Viola palustris*).

NH923462 Map sheet: NH94NW

Flush with scattered birch (*Betula* sp.) and willow (*Salix* sp.).

NH926457 Map sheet: NH94NW

Whole area scarified very recently and planted with Scots pine (*Pinus sylvestris*).

NH933461 Map sheet: NH94NW

Area of valley mire and pools with bogbean (*Menyanthes trifoliata*), bottle sedge (*Carex rostrata*), cotton sedge (*Eriophorum* sp.), butterwort (*Pinguicula vulgaris*), and *Sphagnum* moss species. Also new pond construction.

NH934458 Map sheet: NH94NW

Extensive Scots pine (*Pinus sylvestris*) regeneration on dry heath.

NH938476 Map sheet: NH94NW

Abundance of heath spotted orchid (*Dactylorhiza maculata*). Neutral semi-improved grassland. Marshy area, sedges, cotton sedges (*Eriophorum vaginatum* and *E. angustifolium*), yellow iris (*Iris pseudacorus*), bottle sedge (*Carex rostrata*).

NH944468 Map sheet: NH94NW

Acid grassland improved with manure. Species include sweet vernal grass (*Anthoxanthum odoratum*), Yorkshire fog (*Holcus lanatus*), wavy hair-grass (*Deschampsia flexuosa*), and heath spotted orchid (*Dactylorhiza maculata*).

NH948467 Map sheet: NH94NW

Bare area being colonised by common cotton sedge (*Eriophorum angustifolium*). CRESTED TITS. Raised blanket mire. Drainage attempts have degraded this area. As future efforts may

eventually affect important, species rich areas to the east (see NH951468) there may be cause for concern here.

NH948498     Map sheet: NH94NW

Wet heath with clumps of birch (*Betula* sp.) plus scattered trees - difficult to map precise boundaries. A fence line runs north to south in this area which appears to be coincident with the eastern edge of this map. To the east of this fence the heath has been ploughed and planted with conifers. However there is no sign of planting on this, the west side as yet.

## **NH 94 NE    (Produced 1993)**

NH951468     Map sheet: NH94NE

Blanket bog grading into marginal vegetation. Loch Belivat has shrunk because of this vegetation. Fairly typical M18 *Erica tetralix-Sphagnum papillosum* blanket mire (NVC) with some M19 *Calluna vulgaris-Eriophorum vaginatum* blanket mire (NVC). Extensive birch (*Betula* sp.) regeneration in transition zone.

NH953457     Map sheet: NH94NE

Area of mature Scots pine (*Pinus sylvestris*), birch (*Betula* sp.) and juniper (*Juniperus communis*) with good birch regeneration. Other species include cotton sedge (*Eriophorum vaginatum*), cross leaved heath (*Erica tetralix*), soft rush (*Juncus effusus*), deer sedge (*Trichophorum cespitosum*) [*Scirpus cespitosus*], and various *Sphagnum* moss species. Whole area is interspersed with drier heather (*Calluna vulgaris*) dominated areas.

NH954492     Map sheet: NH94NE

A complex area of good wet heath with birch (*Betula* sp.) woodland and Scots pine (*Pinus sylvestris*) which has been recently ploughed and planted with Scots pine (*Pinus sylvestris*) and possibly other conifers. The heath to the north and west does not appear to have been planted yet. Boundaries and area estimates are approximate.

NH956481     Map sheet: NH94NE

Modified bog. Some evidence of peat digging. Scattered Scots pine (*Pinus sylvestris*) and birch (*Betula* sp.) throughout, but the birch appears to be dying.

NH957483     Map sheet: NH94NE

Mosaic of marshy grassland and heather (*Calluna vulgaris*) with marsh thistles (*Cirsium palustre*), compact rush (*Juncus conglomeratus*) and tufted hair-grass (*Deschampsia cespitosa*). Cross leaved heath (*Erica tetralix*) is abundant in some areas. Willow (*Salix* sp.) and Scots pine (*Pinus sylvestris*) are also present with regeneration of both species occurring.

NH958486     Map sheet: NH94NE

Mainly birch (*Betula* sp.) woodland with Scots pine (*Pinus sylvestris*) and an scrub layer of juniper (*Juniperus communis*) scattered throughout. Ground cover varies from grassy areas



through marshy grassland to blanket bogs with large hummocks of *Sphagnum* appearing regularly.

NH959454    Map sheet: NH94NE

Complex area of mature birch (*Betula* sp.) woodland with some juniper (*Juniperus communis*). Bracken (*Pteridium aquilinum*) forms a dense ground cover and also dominates open spaces on the hillside. Regeneration of birch (*Betula* sp.) occurring. At the top of the steep slope there is a wet heathland area comprising mainly of heather (*Calluna vulgaris*) and cross leaved heath (*Erica tetralix*) with smaller amounts of wood rush (*Luzula sylvatica*), bog asphodel (*Narthecium ossifragum*) and bell heather (*Erica cinerea*).

NH959457    Map sheet: NH94NE

Strip of marshy grassland between areas of bracken (*Pteridium aquilinum*) occurring on a steep slope. Very wet with large numbers of marsh thistles (*Cirsium palustre*) and a few frogs. Running water appeared at the bottom.

NH959472    Map sheet: NH94NE

M18 *Erica tetralix*-*Sphagnum papillosum* blanket mire (NVC), probably once a lochan. Some regeneration of birch (*Betula* sp.) (from drier areas) is taking place. Possibly a transition from a M5 *Carex rostrata*-*Sphagnum squarrosum* mire (NVC), through natural succession.

NH960484    Map sheet: NH94NE

Blanket bog under birch (*Betula* sp.).

NH961476    Map sheet: NH94NE

Appears to be plantation of old Scots pine (*Pinus sylvestris*) with good ground cover and a few wood ant (*Formica* sp.) nests.

NH962470    Map sheet: NH94NE

Area of semi-improved grassland within birch (*Betula* sp.) woodland about half of which is clearly abandoned arable land. Pheasants abundant (clearly bred). Boundary mapping difficult and therefore very approximate.

NH966475    Map sheet: NH94NE

Red squirrel sighting.

NH967467    Map sheet: NH94NE

Red squirrel sighting.

NH968474`    Map sheet: NH94NE

Good semi-natural birch (*Betula* sp.) woodland with stands of Scots pine (*Pinus sylvestris*) which are regenerating without significant browsing damage. Periphery dry with ground flora

dominated by the moss *Rhytidiadelphus triquetrus*, blaeberry (*Vaccinium myrtillus*) and some wavy hair-grass (*Deschampsia flexuosa*). Although no creeping lady's tresses (*Goodyera repens*) was reported the combination of species suggests that some of the woodland is tending towards W18a *Pinus sylvestris*-*Hylocomium splendens* woodland, *Erica cinerea*-*Goodyera repens* sub-community. Much of the woodland is underlain by a relatively species rich wet heath, the latter forming open glades in places.

NH969475 Map sheet: NH94NE

Birch (*Betula* sp.) woodland under-planted with spruce (*Picea* sp.).

NH969479 Map sheet: NH94NE

Mixed woodland, was a good semi-natural birch (*Betula* sp.) woodland now under-planted with Douglas fir (*Pseudotsuga menziesii*).

NH969497 Map sheet: NH94NE

Clumps of mature Scots pine (*Pinus sylvestris*), birch (*Betula* sp.) and willow (*Salix* sp.) occurring among very newly planted Scots pine. At the moment there is a mosaic of marshy grassland containing soft rush (*Juncus effusus*) and common cotton sedge (*Eriophorum angustifolium*), and wet heath containing heather (*Calluna vulgaris*), cross leaved heath (*Erica tetralix*) with clumps of purple moor-grass (*Molinia caerulea*) and a range of mosses and sedges (*Carex* spp.). Regeneration of both Scots pine and birch is apparent amongst the older trees. The above system will probably change considerably as the planted trees mature.

NH970472 Map sheet: NH94NE

Small mixed woodland containing mature beech (*Fagus sylvatica*), Douglas fir (*Pseudotsuga menziesii*) and birch (*Betula* sp.). No regeneration occurring.

NH970494 Map sheet: NH94NE

Large area of wet heathland fairly extensively covered by Scots pine (*Pinus sylvestris*) through natural regeneration, with birch (*Betula* sp.), some willow (*Salix* sp.) and juniper (*Juniperus communis*). Heath consists of heather (*Calluna vulgaris*), blaeberry (*Vaccinium myrtillus*), grasses, mosses and occasional bearberry (*Arctostaphylos uva-ursi*). **WHOLE AREA HAS BEEN DEEP PLOUGHED AND PLANTED OUT WITH VERY YOUNG SCOTS PINE.**

NH971470 Map sheet: NH94NE

Row of mature beech (*Fagus sylvatica*) trees.

NH972465 Map sheet: NH94NE

Man made pond on border of semi-improved field and wood. Only soft rush (*Juncus effusus*) and marsh woundwort (*Stachys palustris*) present at the moment but has potential. Mallard with ducklings present.

NH973472 Map sheet: NH94NE

Surrounding woodlands = Small areas of mixed plantation with mature coniferous and deciduous trees already present. Evidence of attempts to re-introduce natural mixed woodland into the area.

NH973480 Map sheet: NH94NE

Fairly open Scots pine (*Pinus sylvestris*) plantation with a dense under-storey of birch (*Betula* sp.), some larch (*Larix* sp.), rowan (*Sorbus aucuparia*) and holly (*Ilex aquifolium*), a continuous ground cover of bracken (*Pteridium aquilinum*) and a variety of grass species.

NH973496 Map sheet: NH94NE

Dense stand of natural Scots pine (*Pinus sylvestris*) and birch (*Betula* sp.).

NH973498 Map sheet: NH94NE

Area with abundance of tufted hair-grass (*Deschampsia cespitosa*), marsh thistle (*Cirsium palustre*), foxglove (*Digitalis purpurea*), heather (*Calluna vulgaris*), bent-grasses (*Agrostis* spp.), Yorkshire fog (*Holcus lanatus*) and some juniper (*Juniperus communis*) BUT has been planted throughout with Sitka spruce (*Picea sitchensis*).

NH975477 Map sheet: NH94NE

Red squirrel sighting.

NH976496 Map sheet: NH94NE

Clumps of mature Scots pine (*Pinus sylvestris*), birch (*Betula* sp.) and willow (*Salix* sp.) occurring among very newly planted Scots pine. At the moment there is a mosaic of marshy grassland containing soft rush (*Juncus effusus*) and common cotton sedge (*Eriophorum angustifolium*), and wet heath containing heather (*Calluna vulgaris*), cross leaved heath (*Erica tetralix*) with clumps of purple moor-grass (*Molinia caerulea*) and a range of mosses and sedges (*Carex* spp.). Regeneration of both Scots pine and birch is apparent amongst the older trees. The above system will probably change considerably as the planted trees mature.

NH977493 Map sheet: NH94NE

Good wet heathland covered by naturally occurring Scots pine (*Pinus sylvestris*) and birch (*Betula* sp.) with regeneration of both.

NH978487 Map sheet: NH94NE

Mature larch (*Larix* sp.) plantation with abundant hazel (*Corylus avellana*) shrub layer and ground cover of moss and bracken (*Pteridium aquilinum*).

NH979494 Map sheet: NH94NE

Good wet heathland covered by naturally occurring Scots pine (*Pinus sylvestris*) and birch (*Betula* sp.) with regeneration of both.

NH980490 Map sheet: NH94NE

Conifer plantation but interspersed with birch (*Betula* sp.), alder (*Alnus glutinosa*) and with bracken (*Pteridium aquilinum*) ground cover.

NH980492 Map sheet: NH94NE

Good wet heathland covered by naturally occurring Scots pine (*Pinus sylvestris*) and birch (*Betula* sp.) with good regeneration of both.

NH980494 Map sheet: NH94NE

10 metre broad patch of wet heath with scattered mature juniper (*Juniperus communis*) along side of wall.

NH981489 Map sheet: NH94NE

Regeneration of birch (*Betula* sp.) above newly planted conifers. Red squirrel sighting.

NH983491 Map sheet: NH94NE

Area felled some time ago has reverted to heath/acid grassland with scattered birch (*Betula* sp.) and some exotic conifer saplings which appear to be self-sown. Bracken (*Pteridium aquilinum*) and gorse (*Ulex europaeus*) are also present in parts.

NH984493 Map sheet: NH94NE

Birch (*Betula* sp.) with ground cover of bracken (*Pteridium aquilinum*), under-planted with spruce (*Picea* sp.) in some places. The wildlife value of this woodland will inevitably be reduced as the spruce matures and shades out other species.

NH986492 Map sheet: NH94NE

Very old holly (*Ilex aquifolium*) tree, approximately 8m high, 30cm diameter.

NH988493 Map sheet: NH94NE

Plantation containing several species of conifer but with abundant birch (*Betula* sp.), oak (*Quercus* sp.), sycamore (*Acer pseudoplatanus*) and alder (*Alnus glutinosa*). A large number of alder are also growing along the road side.

## **NH 94 SW (Produced 1993)**

NH932414 Map sheet: NH94SW

Dulsie Bridge. A kestrel nest was found beside Dulsie Bridge, on the gorge wall. There were four young kestrel ready to fledge (mid June 1993).

NH933427 Map sheet: NH94SW

Semi-natural birch (*Betula* sp.) wood with occasional Scots pine (*Pinus sylvestris*), rowan (*Sorbus aucuparia*) and eared willow (*Salix aurita*) and also juniper (*Juniperus communis*). Ground layer: bracken (*Pteridium aquilinum*), heather (*Calluna vulgaris*), blaeberry (*Vaccinium myrtillus*), common cow-wheat (*Melampyrum pratense*), tormentil (*Potentilla erecta*), chickweed wintergreen (*Trientalis europaea*), wood sorrel (*Oxalis acetosella*), bugle (*Ajuga reptans*), sweet vernal grass (*Anthoxanthum odoratum*) and various mosses.

NH935401 Map sheet: NH94SW

Two black-headed gull colonies, situated 800 metres apart around small lochans. This colony is the larger. (Also at NH941406).

NH941406 Map sheet: NH94SW

Two black-headed gull colonies, situated 800 metres apart around small lochans. This colony is the smaller. (Also square 9340, NH935401).

NH941440 Map sheet: NH94SW

*Sphagnum* (blanket) bog. Birch (*Betula* sp.) is the dominant tree species around the edge of the bog with the occasional Scots pine (*Pinus sylvestris*). Ground layer: *Sphagnum* moss, cross leaved heath (*Erica tetralix*), cotton sedge (*Eriophorum* sp.), soft rush (*Juncus effusus*), tormentil (*Potentilla erecta*), juniper (*Juniperus communis*), heather (*Calluna vulgaris*), bracken (*Pteridium aquilinum*), orchid (*Dactylorhiza* sp.).

NH948428 Map sheet: NH94SW

Loch Leven area. Scots pine (*Pinus sylvestris*) plantation. Good ground cover including heather (*Calluna vulgaris*), blaeberry (*Vaccinium myrtillus*) and sphagnum moss sp.

## **NH 94 SE (Produced 1993)**

NH960449 Map sheet: NH94SE

Densely wooded gorge with a wide range of broadleaf species.

NH961417 Map sheet: NH94SE

Loch Kirkaldy area. Scots pine (*Pinus sylvestris*) woodland. Appears semi-natural but some probably planted. The area is backed by plantation also of Scots pine but of unknown seed origin. The area in general is diverse in habitats and thus also species, with beds of bottle

sedge (*Carex rostrata*), a small area of willow (*Salix* sp.) carr north-east of the boat house, marshy grassland, burn, blanket mire, dry H12 *Calluna vulgaris*-*Vaccinium myrtillus* heath (NVC), birch (*Betula* sp.) woodland, dense bracken (*Pteridium aquilinum*) and deer sedge (*Trichophorum cespitosum*) [*Scirpus cespitosus*] wet heath. Clearly a potential wildlife zone and core area for species emigration.

NH970417 Map sheet: NH94SE

Two fragrant orchids (*Gymnadenia conopsea*) found among heath spotted orchids (*Dactylorhiza maculata*) on wet heath with deer sedge (*Trichophorum cespitosum*) [*Scirpus cespitosus*], heather (*Calluna vulgaris*), purple moor-grass (*Molinia caerulea*) and the lichen *Cladonia portentosa*.

NH980403 Map sheet: NH94SE

*Relatively species rich U5c Nardus stricta*-*Galium saxatile* grassland (NVC). The best example of this NVC community found in Nairn District. Species list available.

NH983408 Map sheet: NH94SE

M19 *Calluna vulgaris*-*Eriophorum vaginatum* blanket mire (NVC) modified by drainage but still relatively intact. Contains bog pools and abundant *Cladonia* sp. (lichen). This area in general is a significant landscape feature which could easily be destroyed by conifer plantations, peat extraction or further attempts at drainage. However, regeneration of native woodland in dryer parts could enhance the wildlife interest of the area.

MO - NH987407 Map sheet: NH94SE

This flushed area adjacent to the burn has developed striking marginal vegetation of reed canary grass (*Phalaris arundinacea*) with bottle sedge (*Carex rostrata*).

MO - NH985409 Map sheet: NH94SE

The small islands of dry heath within the blanket mire here are H16c *Calluna vulgaris*-*Arctostaphylos uva-ursi* heath, *Cladonia* sp. sub-community (NVC). However, they are species poor due to excessive burning. Species present - heather (*Calluna vulgaris*), bearberry (*Arctostaphylos uva-ursi*), deer sedge (*Trichophorum cespitosum*) [*Scirpus cespitosus*] and little else. *Cladonia* (lichen) is abundant on the adjacent mire but is absent on the dry heath due to the burning.

NH902575 Map sheet: NH94SE

Scrub clearance. Four new holes under construction for golf course. RSPB consent.

NH905578 Map sheet: NH94SE

Brackish wet area dominated by bulrushes (*Schoenoplectus* spp.) and sea scirpus (*Scirpus maritima*). Heron feeding ground. RSPB reserve.

NH909579 Map sheet: NH94SE

Species rich interface between saltmarsh and forest. The combination of habitats in locations such as this produces particularly high species richness and thus high wildlife value. The plant species list below from this site gives an example of this (Latin names only, alphabetical order):

<i>Ammophila arenaria</i>	<i>Myosotis</i> sp.
<i>Angelica sylvestris</i>	<i>Ononis repens</i>
<i>Armeria maritima</i>	<i>Plantago maritima</i>
<i>Arrhenatherum elatius</i>	
<i>Puccinellia maritima</i>	<i>Rhinanthus minor</i>
<i>Aster tripolium</i>	<i>Rosa canina</i>
<i>Atriplex</i> spp.	<i>Rosa pimpinellifolia</i>
<i>Calluna vulgaris</i>	<i>Sagina nodosa</i>
<i>Centaureum littorale</i>	<i>Senecio jacobaea</i>
<i>Chamaenerion angustifolium</i>	<i>Silene maritima</i>
<i>Cochlearia officinalis</i>	<i>Sarothamnus</i> [ <i>Cytisus</i> ] <i>scoparius</i>
<i>Elymus arenarius</i>	<i>Sonchus arvensis</i>
<i>Empetrum nigrum</i>	<i>Spergularia</i> sp.
<i>Euphrasia</i> sp.	<i>Stellaria graminea</i>
<i>Glaux maritima</i>	<i>Trifolium pratense</i>
<i>Goodyera repens</i>	<i>Trifolium repens</i>
<i>Heracleum sphondylium</i>	<i>Triglochin maritima</i>
<i>Holcus lanatus</i>	<i>Triglochin palustris</i>
<i>Honkenya peploides</i>	<i>Tripleurospermum maritimum</i>
<i>Tussilago farfara</i>	
<i>Juncus</i> spp.	<i>Ulex europaeus</i>
<i>Lathyrus pratensis</i>	<i>Valeriana officinalis</i>
<i>Lotus corniculatus</i>	<i>Vicia sativa</i>

NH911593 Map sheet: NH94SE

Sea rocket (*Cakile maritima*), sand couch (*Agropyron junceiforme*). Interesting agaric fungus on dunes; presumably associated with marram grass (*Ammophila arenaria*).

NH912579 Map sheet: NH94SE

An area (within a coniferous plantation) of approximately 300 by 100 metres which was burned down some time ago leading to regeneration of Scots pine (*Pinus sylvestris*), birch (*Betula* sp.) and some rowan (*Sorbus aucuparia*). Understorey of gorse (*Ulex europaeus*) and broom (*Sarothamnus* [*Cytisus*] *scoparius*), dense in places. Ground flora of heather (*Calluna vulgaris*) with mosses and grass.

NH915596 Map sheet: NH94SE

Common lizards.

NH917598 Map sheet: NH94SE

Much of the area has rosebay willowherb (*Chamaenerion angustifolium*) as the dominant species. Crowberry (*Empetrum nigrum*) also abundant. Some areas of lichen dominated vegetation amongst the dune grassland and scrub. *Cladonia* spp. especially.

NH923584 Map sheet: NH94SE

Loch Loy west. Reedmace (*Typha latifolia*) dominates, with abundant bottle sedge (*Carex rostrata*) with yellow iris (*Iris pseudacorus*). Willow (*Salix* sp.) is abundant with alder (*Alnus glutinosa*) and some birch (*Betula* sp.). The ground adjacent to the loch is dominated by *Sphagnum* moss. On the south side there is dense scrub of gorse (*Ulex europaeus*) and broom (*Sarothamnus* [*Cytisus*] *scoparius*) and the occasional holly (*Ilex aquifolium*). Bog myrtle (*Myrica gale*) is also abundant. The loch is rich in invertebrates including damsel fly and dragonfly (both adults and larvae), water boatman, wirlygig beetles, caddis fly and midge larvae. The loch also supports frogs, toads and sticklebacks. Birds include heron, buzzard, coal tit, long tailed tit, blue tit, great tit, wren and gold crest. Fox signs were found and roe deer sighted.

NH929585 Map sheet: NH94SE

The area between Loch Loy west and Loch Loy east is dominated by willow (*Salix* sp.) carr with some alder (*Alnus glutinosa*) around the edges. Birch (*Betula* sp.) is abundant and yellow iris (*Iris pseudacorus*) frequent.

NH933586 Map sheet: NH94SE

Loch Loy east. Similar flora to Loch Loy West (NH923584) but the larger area of open water supports more water fowl including whooper swans (sighted each year between 1989 and 1993). Damsel flies and dragonflies abundant. Amphibians, especially toads common. The loch is surrounded by reedmace (*Typha latifolia*) and bottle sedge (*Carex rostrata*) at the margins.

NH933587 Map sheet: NH94SE

Loch Loy. Dragonflies and damselflies much in evidence. Amphibians, especially toads. The loch is surrounded by common reedmace (*Typha latifolia*) and bottle sedge (*Carex rostrata*) at its periphery. The mixed woodland by Loch Loy and Cran Loch are probably of particular interest but the entire area of coastal marsh and grassland and much of Culbin Forest has high wildlife value. There are both faunal and floristic reasons for this.

NH941589 Map sheet: NH94SE

Cran Loch. Willow (*Salix* sp.) carr with alder (*Alnus glutinosa*) and birch (*Betula* sp.) around edges. Yellow iris (*Iris pseudacorus*) frequent with reedmace (*Typha latifolia*) dominating the areas of willow. In general the area is similar to Loch Loy east and west with a rich flora and fauna including many aquatic plants, ducks, mute swans, little grebe, moorhen, snipe, frogs and toads.



NH945592 Map sheet: NH94SE

Swamp of emergent vegetation with scattered willow (*Salix* sp.) around Cran Loch. Reedmace (*Typha latifolia*) abundant, also water mint (*Mentha aquatica*), common valerian (*Valeriana officinalis*), marsh thistle (*Cirsium palustris*), marsh pennywort (*Hydrocotyle vulgaris*) and soft rush (*Juncus effusus*).

NH949569 Map sheet: NH94SE

Birch (*Betula* sp.) woodland, partly thinned. Ground layer diverse including heather (*Calluna vulgaris*), cross-leaved heath (*Erica tetralix*), sweet vernal grass (*Anthoxanthum odoratum*), Yorkshire fog (*Holcus lanatus*), heath wood-rush (*Luzula multiflora*), creeping bent-grass (*Agrostis stolonifera*) and tormentil (*Potentilla erecta*).

NH949590 Map sheet: NH94SE

Mixed woodland of birch (*Betula* sp.) with the occasional Scots pine (*Pinus sylvestris*). Semi-natural ground layer of heathland species.

## **NH 95 NW (Produced 1993)**

NH901577 Map sheet: NH95NW

Common lizards.

## **NH 95 NE (Produced 1993)**

NH950558 Map sheet: NH95NE

Very small wooded area in middle of arable field. Contains dried up or seasonal pond surrounded by willow (*Salix* sp.), elderberry (*Sambucus nigra*), rowan (*Sorbus aucuparia*) and elm (*Ulmus* sp.).

NH951570 Map sheet: NH95NE

Wet heath/birch (*Betula* sp.) mosaic; birch encroaching into heathland. Grades into marshy grassland with direction of drainage (south).

NH952576 Map sheet: NH95NE

Regenerating birch (*Betula* Sp.) woodland, encroaching on to low scrub (now nearly completely replaced by birch).

NH956581 Map sheet: NH95NE

Insoch Wood. Scots pine (*Pinus sylvestris*) plantation with good under-storey of birch (*Betula* sp.) of various ages. Relatively diverse ground flora including honeysuckle (*Lonicera periclymenum*), mosses and lichens. Also western hemlock (*Tsuga heterophylla*).

NH959575 Map sheet: NH95NE

Ellands Burn from edge of Insoch Wood to railway line has been filled and turned to grassland.

MO - NH965568 Map sheet: NH95NE

Hardmuir Wood. Scots pine (*Pinus sylvestris*) plantation. Continuous birch (*Betula* Sp.) under-storey; diverse ground flora including areas of wet shrub heath.

## **NH 95 SW (Produced 1993)**

NH901545 Map sheet: NH95SW

Scots pine (*Pinus sylvestris*) plantation with continuous ground flora, mainly grasses. Also an understorey in places of rowan (*Sorbus aucuparia*), beech (*Fagus sylvatica*), birch (*Betula* sp.) and some sycamore (*Acer pseudoplatanus*) - dense in places.

NH908541 Map sheet: NH95SW

Broadleaf woodland now under-planted with spruce (*Picea* sp.).

NH911519 Map sheet: NH95SW

Species rich marshy grassland with meadowsweet (*Filipendula ulmaria*), marsh thistle (*Cirsium palustre*) and sedges (*Carex* spp.).

NH911523 Map sheet: NH95SW

Artificial pond with marginal vegetation of bottle sedge (*Carex rostrata*), soft rush (*Juncus effusus*) and horsetail (*Equisetum* sp.), with marshy grassland with black bog rush (*Schoenus nigricans*) and purple moor-grass (*Molinia caerulea*) adjacent. The land-owners have taken considerable effort to increase the wildlife value of their land. Some, limited botanical surveying has already been carried out by SNH. In general, this area is of particularly high wildlife value. Fauna recorded includes: wildcat, otter, mink, red squirrel, stoat, hare, rabbit, fox, mole, roe deer.

NH912509 Map sheet: NH95SW

Potentially interesting semi-natural marshy grassland/scrub and ponds, but now part of a duck farm.

NH920511 Map sheet: NH95SW

Small mixed woodland, mainly birch (*Betula* sp.) but with some Scots pine (*Pinus sylvestris*) and mature juniper (*Juniperus communis*). Ground flora approximating to semi-natural native pinewood. Also some gorse (*Ulex europaeus*). No regeneration.

NH922501    Map sheet: NH95SW

Wet heath/acid grassland mosaic tending to wet modified bog and purple moor-grass (*Molinia caerulea*) flush in places. Gorse (*Ulex europaeus*) clumps scattered in dryer parts and some juniper (*Juniperus communis*). To the east the area grades into semi-natural Scots pine (*Pinus sylvestris*) woodland with juniper which in turn grades into Scots pine plantation. The area is diverse in habitat but heavily grazed by deer, rabbits and sometimes livestock. The woodland also contains stands of birch (*Betula* sp.) which show some signs of regeneration (Scots pine is not regenerating) plus dense, impenetrable gorse (*Ulex europaeus*) thickets.

NH923507    Map sheet: NH95SW

Small, mixed woodland, mainly birch (*Betula* sp.) but with Scots pine (*Pinus sylvestris*) and mature juniper (*Juniperus communis*). Ground flora approximates to semi-natural native pinewood. However, the south half is now under-planted with spruce (*Picea* sp.) and will therefore deteriorate as a habitat. Also some gorse (*Ulex europaeus*).

NH926546    Map sheet: NH95SW

"Policy" woodland - wide range of tree species but the mature trees being selectively removed over a period of time despite preservation orders (according to local residents).

NH927531    Map sheet: NH95SW

Abandoned arable land - some willow (*Salix* sp.) recently planted. Appears as waste ground with common species such as docks plus bare earth.

NH929542    Map sheet: NH95SW

Birch/sycamore (*Betula/Acer pseudoplatanus*) woodland with willow (*Salix* sp.) in wetter parts. Felled for timber about 15 years ago. Very good regeneration since then and now very dense. Wet in parts, high species richness. Contains wood club-rush (*Scirpus sylvaticus*) thought to be absent in the north of Scotland.

NH932549    Map sheet: NH95SW

Shallow pond - relatively high flora richness, surrounded by trees including cherry (*Prunus* sp.) and shrubs including hawthorn (*Crataegus monogyna*).

NH937514    Map sheet: NH95SW

Mature beech woodland with 100% ground cover of grasses and some dicotyledon herbs. Also scattered, mature, exotic conifers. Some rhododendron. (Would make a pleasant amenity woodland.)

NH939540    Map sheet: NH95SW

Birch (*Betula* sp.) woodland and gorse (*Ulex europaeus*) scrub with mature Scots pine (*Pinus sylvestris*), but now recently under-planted with conifers.

NH941537 Map sheet: NH95SW

Birch (*Betula* sp.) woodland with some mature Scots pine (*Pinus sylvestris*) (though not enough to be classed as mixed woodland).

## **NH 95 SE (Produced 1993)**

NH955503 Map sheet: NH95SE

A complex mosaic of Scots pine (*Pinus sylvestris*) and birch (*Betula* sp.) woodland and wet heath/acid grassland mosaic. The Scots pine is regenerating successfully (around 2-5 years old) making this an important site. However, the heath to the south has been ploughed and planted with conifers. Whether this will eventually affect this area is unknown. Boundaries and area estimates are approximate.

NH957522 Map sheet: NH95SE

Extensive birch (*Betula* sp.) woodland with considerable wildlife potential but some cattle grazing and no regeneration.

NH958524 Map sheet: NH95SE

Wet, purple moor-grass (*Molinia caerulea*) grassland with bog asphodel (*Narthecium ossifragum*).

NH959525 Map sheet: NH95SE

Small clump of mature Scots pine (*Pinus sylvestris*) with juniper (*Juniperus communis*). No regeneration.

NH961525 Map sheet: NH95SE

Mature birch (*Betula* sp.) woodland. Extensive but heavily grazed (deer and cattle) therefore regeneration and ground flora limited.

NH963503 Map sheet: NH95SE

A complex mosaic of birch (*Betula* sp.) woodland and wet heath/ acid grassland but entire area (except for denser stands of birch) has been ploughed and planted with spruce (*Picea* sp.). Currently the area represents a good semi-natural wildlife habitat but this will decline through shading and drying out as conifers develop.

NH973546 Map sheet: NH95SE

Large mature beech (*Fagus sylvatica*) and a red squirrel sighted.

NH976545 Map sheet: NH95SE

Mature beech (*Fagus sylvatica*) woodland with relatively well developed ground cover.

## NH 96 SW (Produced 1993)

NH925604 Map sheet: NH96SW

Glasswort (*Salicornia* sp.) and annual sea-blite (*Suaeda maritima*) form a dense turf on most of these inlets.

NH931606 Map sheet: NH96SW

Much of this area is saltmarsh. Boundaries ill-defined.

NH941605 Map sheet: NH96SW

Species rich interface between saltmarsh and forest. The combination of habitats in locations such as this produces particularly high species richness and thus high wildlife value. See the plant species list for NH909579 for an example of this.

NH944603 Map sheet: NH96SW

The Culbin Forest is an important feature of this general area. Much if it is a plantation composed largely of pine but areas of mixed and broadleaf woodland lend diversity. The adjacent saltmarsh (an RSPB reserve), the shingle bar and the mixed woodland by Loch Loy and Cran Loch are probably of particular interest but the entire area represents an important collection of wildlife habitats which complement each other.

NH945604 Map sheet: NH96SW

The saltmarsh is an RSPB reserve. Culbin forest also contains some reserve areas (consult Forest Enterprise and RSPB for more details). The dune grassland by Nairn and on the shingle bar itself supports common lizards. Measures are needed to exclude off-road motor vehicles from the saltmarsh, and shooting for wildfowl vigorously discouraged. (Evidence of both was seen during this survey.)

