



# **NESBReC's use of Integrated Habitat System**

**Glenn Roberts  
NESBReC Manager**

# North East Scotland Biological Records Centre

- Established 2000
- Office in Aberdeen, part of Aberdeenshire Council
- Covers Aberdeenshire, Aberdeen City, Moray, Cairngorms National Park



# Aberdeenshire, Aberdeen City, Moray and Cairngorms National Park



# North East Scotland Biological Records Centre

- Focus for biodiversity information in North-East Scotland
- Collates, stores and manages biological data

# Current Financial Supporters

- Scottish Natural Heritage, Aberdeenshire Council, Aberdeen City Council, RSPB, Forestry Commission Scotland, Cairngorms National Park Authority



# Records on Species

Over 1,512,000 records so far



# Integrated Habitat System

- Using IHS since 2004  
at NESBReC



# Brief history of IHS

- Developed by Somerset Environmental Records Centre (SERC) in late 1990s
- Developed with GIS in mind
- First used by SERC in 1999
- Used around UK since 2000
- Version 2.0 produced in 2007
- Flexible surveying methodology to suit varying projects
- Around 460 different habitat classifications possible
- <http://ihs.somerc.co.uk>



# Habitat surveying since 2004



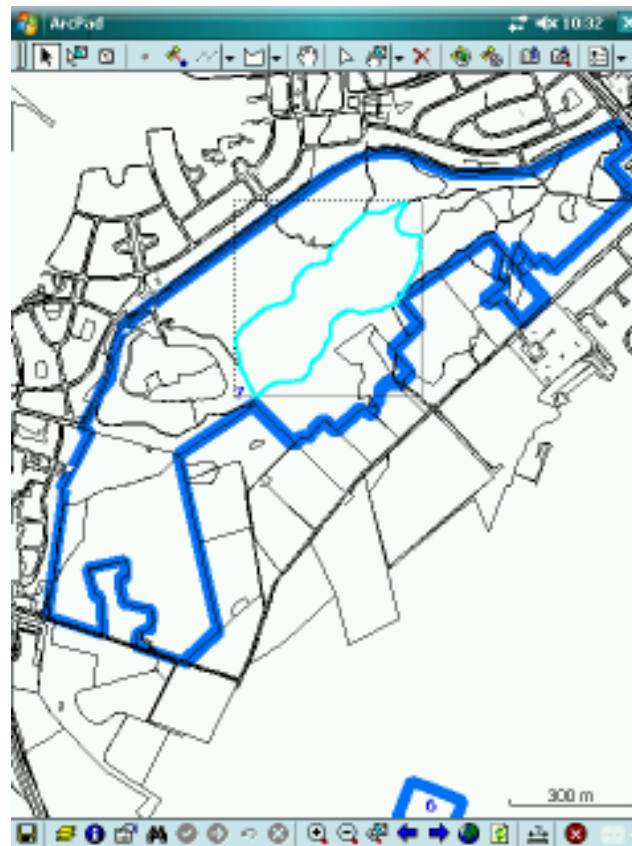


# Integrated Habitat System

- Survey data feeds into planning system
- Compile lists of plant species
- Record faunal sightings when encountered



- Use underlying Ordnance Survey Mastermap layer to map habitats on to
- These have selectable polygons
- Can also draw polygons freehand to over-ride existing Mastermap boundaries



- Decide the habitat type for a particular polygon
- Assign any other matrices of vegetation
- Assign any land use
- Add any notable comments

The screenshot shows the ArcPad application window with the 'BTS Survey' form open. The form contains several input fields for data entry:

- habitat**: A dropdown menu.
- matx 1**: A dropdown menu.
- matx 2**: A dropdown menu.
- matx 3**: A dropdown menu.
- Comm 1**: A large text area for comments.
- form 1**: A dropdown menu.
- form 2**: A dropdown menu.
- Comm 2**: A large text area for comments.
- land 1**: A dropdown menu.
- land 2**: A dropdown menu.
- Comm 3**: A large text area for comments.

At the bottom of the screen, there is a navigation bar with three tabs: 'Habitat', 'Plants', and 'Attributes'. The 'Habitat' tab is currently selected. The bottom status bar shows a green circle with a white 'x' and a red 'x' icon.

- Large range of habitat types to choose from
- All UK Biodiversity Action Plan (UK BAP) habitat types
- Broad Habitat types and Priority Habitat types, e.g.  
WB3 Broadleaved Woodland and WB34 Wet Woodland

habitat

matx 1

matx 2

matx 3

Comm 1

form 1

form 2

Comm 2

land 1

land 2

Comm 3

SSZ - Other supralittoral sediment

URD - Built-up areas and gardens

WB0 - Broadleaved, mixed, and yew woodland

WB1 - Mixed woodland

WB2 - Scrub woodland

WB3 - Broadleaved woodland

WB31 - Upland oakwood (=Old sessile oak woods)

WB32 - Upland mixed ashwoods

WB33 - Beech and yew woodlands

WB34 - Wet woodland

WB341 - Alluvial forests with *Alnus glutinosa*

WB342 - Bog woodland

WB342 - Other wet woodland

WB35 - Upland birch woodland

WB36 - Lowland mixed deciduous woodland

WB37 - Lowland birch woodland

WB32 - Other broadleaved woodland

WCD - Coniferous woodland

WC1 - Native pine woodlands

WC12 - Other native pine woodlands

WC2 - Other coniferous woodland

Habitat

Plants

Attributes

OK

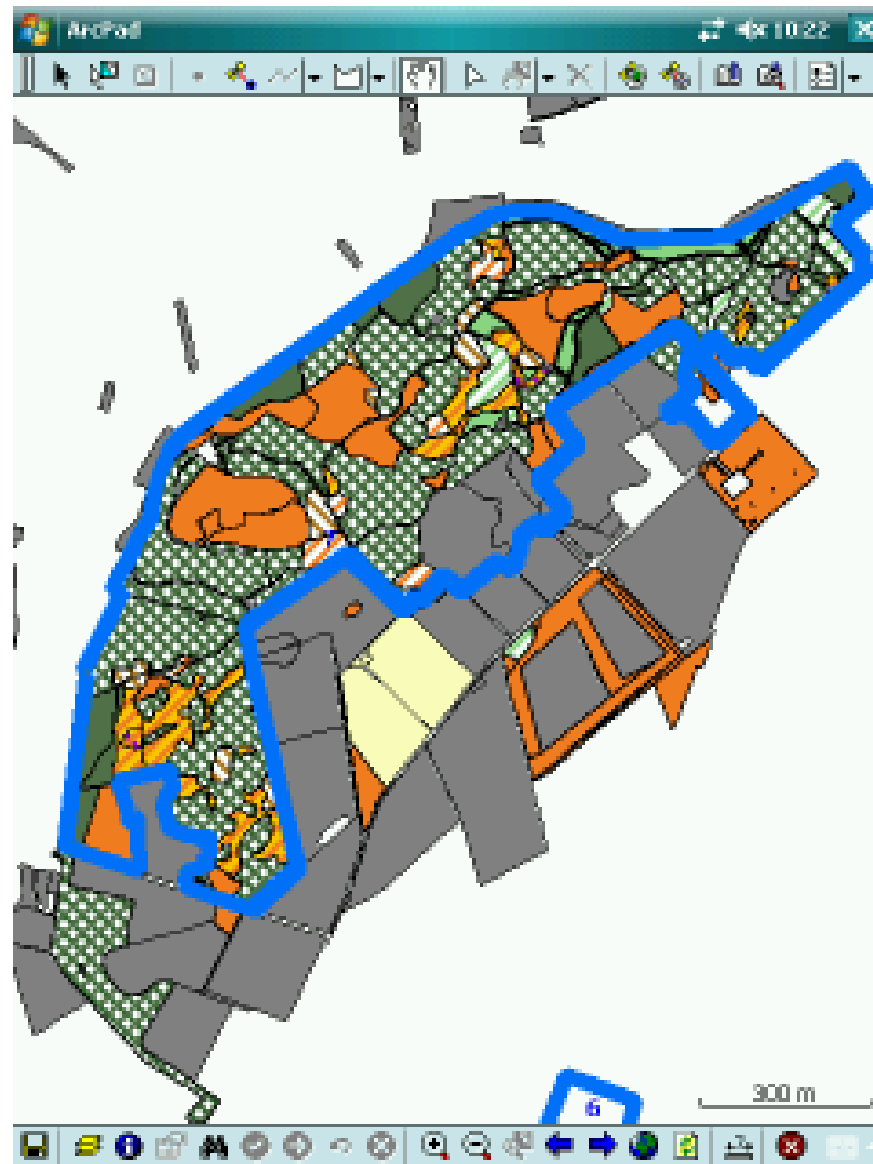
- Compile a list of plant species: up to 30 for each polygon
- NESBReC plant list has 1070 species
- Habitat indicators and rare species especially important
- Each plant must have a DAFOR scale rating

- NESBReC surveys allow input of faunal species too
- Useful by-product for a Local Records Centre
- A point on the map represents the location of a sighting

The screenshot shows the 'Species Recorder' application window. The title bar indicates it is running on 'Android' at '10:32'. The interface is divided into several sections:

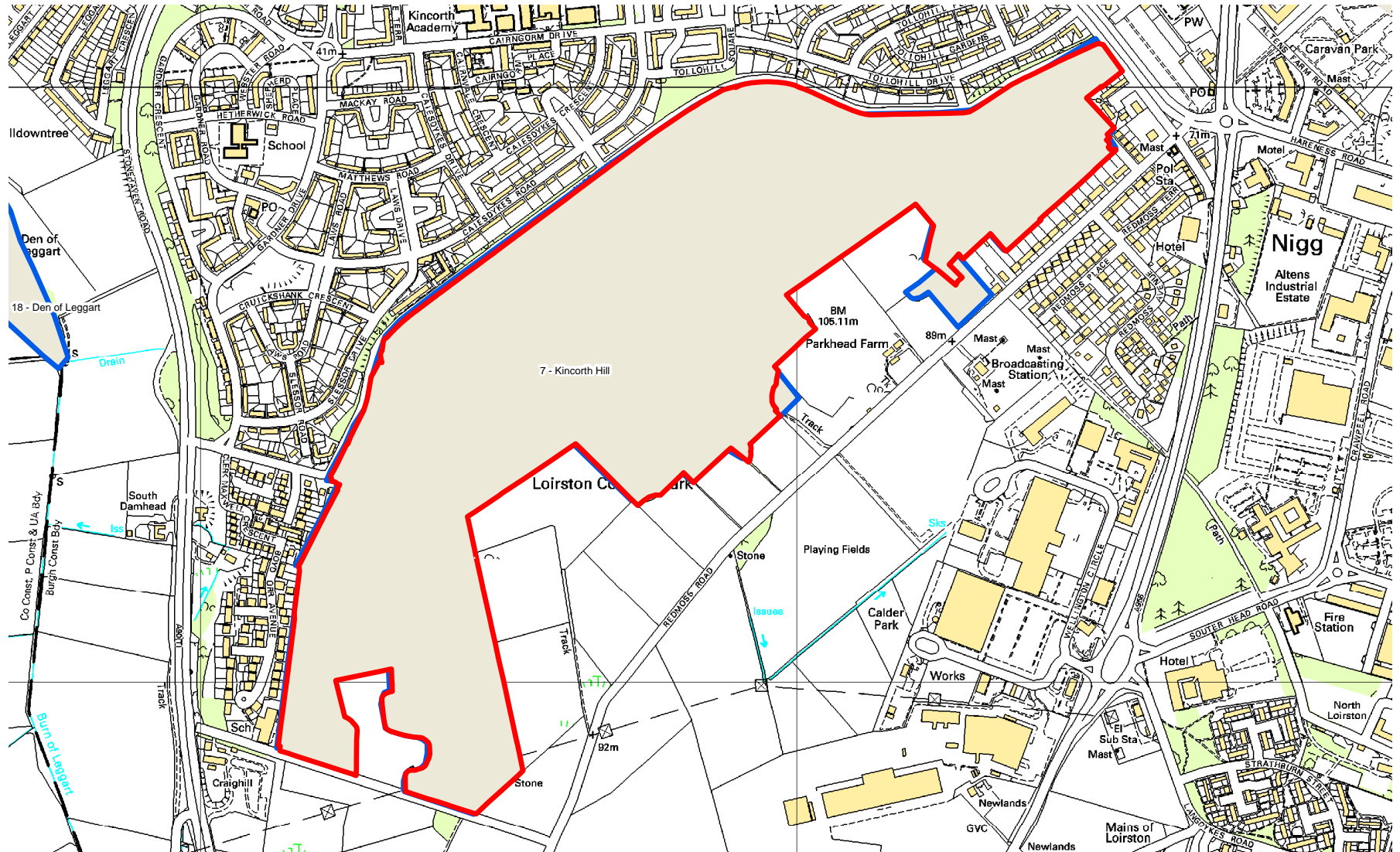
- Species List:** A scrollable list of bird species on the left, including Barn owl, black-headed gull, blackbird, blackcap, blue tit, brambling, bullfinch, buzzard, canada goose, carrion crow, chaffinch, chaffinch, coal tit, collared dove, common gull, common sandpiper, common scoter, common tern, coot, cormorant, corn bunting, crane, cuckoo, curlew, dipper, dunlin, dunlock, eider, feral pigeon, fieldfare, fulmar, gannet, goldcrest, goldeneye, goldfinch, and goosander.
- Behavioral Data:** A list of behaviors on the right, including dead, feeding, flying, perching, flushed, calling, territorial dispute, and singing.
- Form Fields:**
  - recorder: Glenn Roberts (dropdown)
  - date: 10/4/11 (calendar icon)
  - count: 1 (text input)
  - notes: (text input)
  - grid ref: NJ 93741 02560 (text input)
  - location: Tullos (text input)
  - ☐ Sample taken: 0 (checkbox and text input)
  - scientific: (text input)
  - common: (text input)
- Action Buttons:** 'Add', 'Add from list...', and 'Remove' buttons are located below the form fields.
- Image Section:** An 'image' label is above a large grey rectangular area, with an 'Enlarge...' button below it.
- Navigation Bar:** At the bottom, there are tabs for 'Defaults', 'Birds', 'Plants', 'Moss', 'Insects', 'Mammals', and 'Other'. The 'Birds' tab is currently selected.
- Status Bar:** The bottom of the screen shows the Android status bar with a green 'OK' button, a red 'X' button, and a battery level indicator.

- Build up a colour-coded map profile of the habitat types

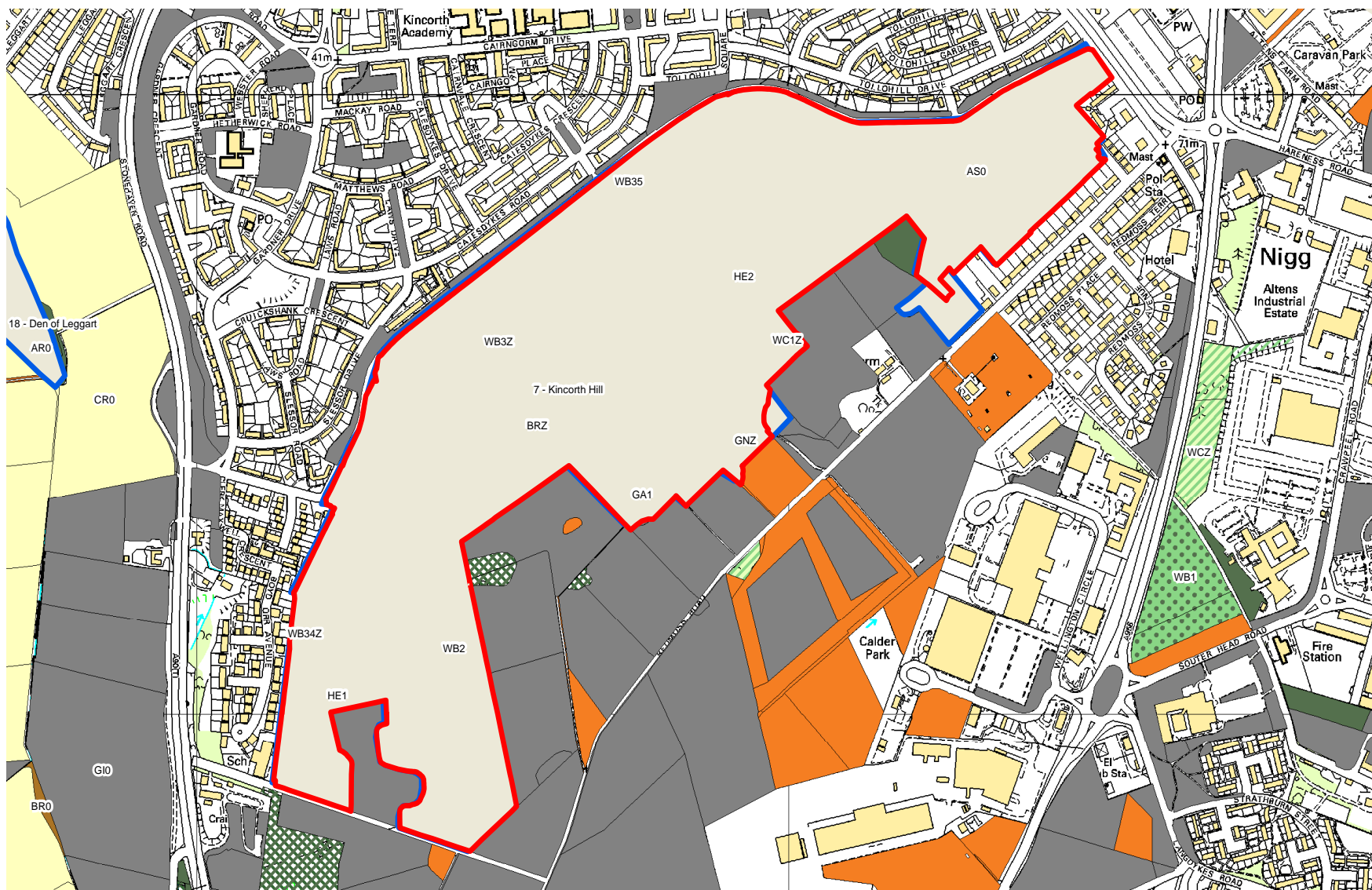




# Kincorth Hill, Aberdeen



# Kincorth Hill habitat map

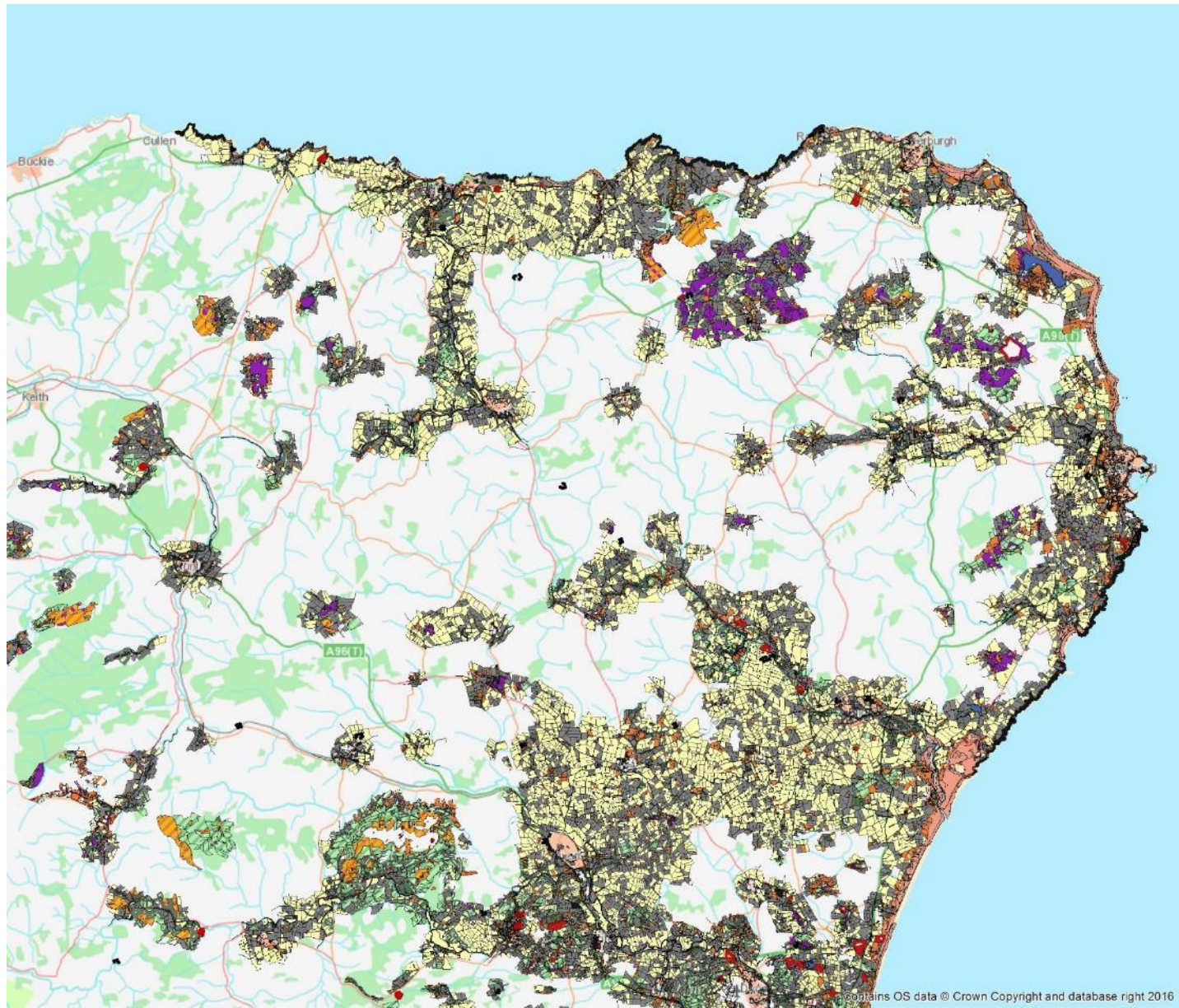


# Why use Integrated Habitat System?

- UK BAP habitat types
- Relatively fast and cost-effective way to survey large areas for habitats and plant species
- Attractive option for large scale survey projects
- Quicker than Phase 1 and National Vegetation Classification

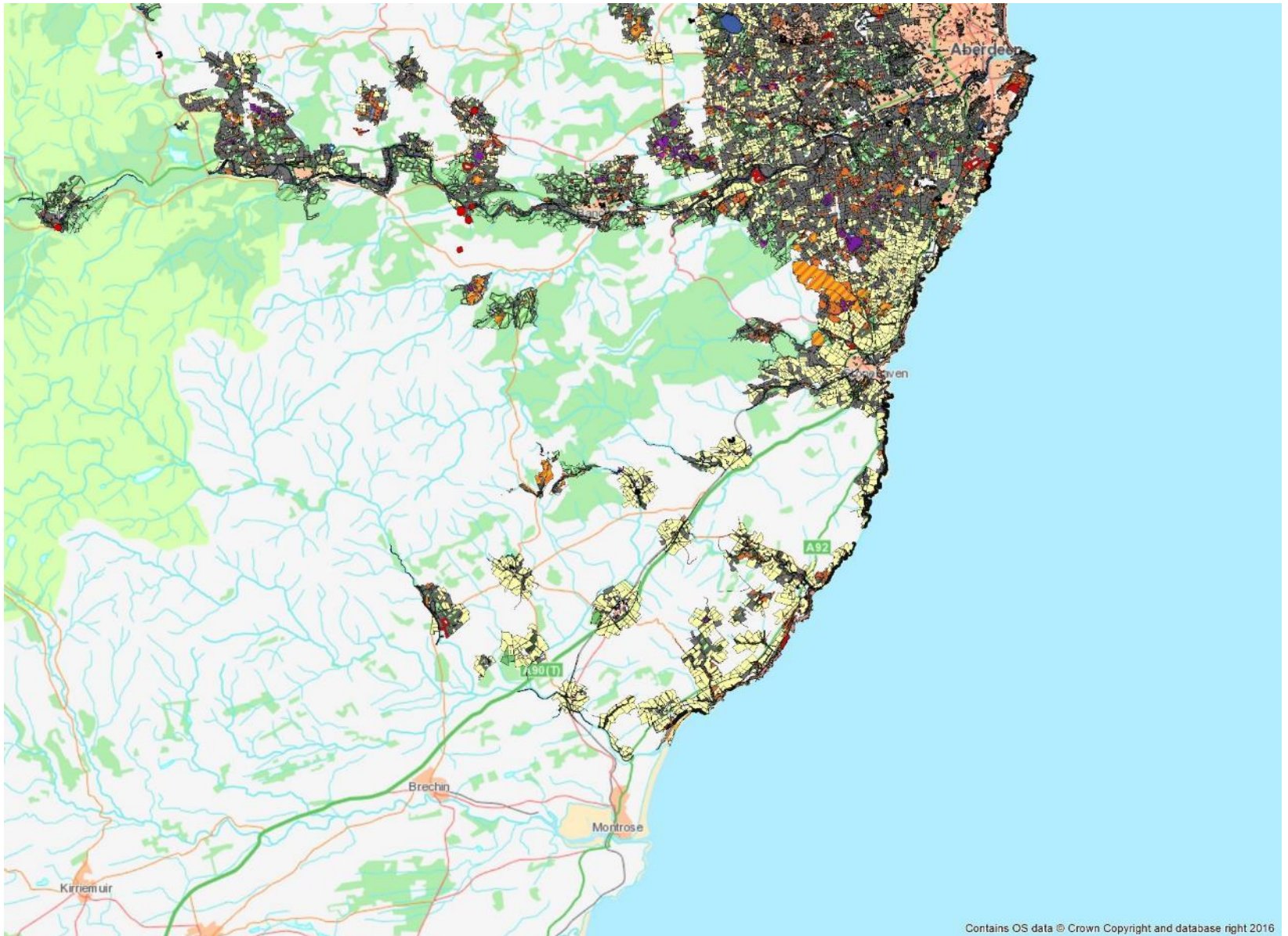


# Survey coverage 2004-2016





# Survey coverage 2004-2016



# Plant records passed on from NESBReC to BSBI

- Over 350,000 records - from 2004-2014
- More to be passed on from 2015-2018
- More surveying taking place in 2019

