

Information for managing the coastal zone in the 1990s: the example of United Kingdom coastal and estuarine directories and inventories

N.C. Davidson

Davidson, N.C. 1998. Information for managing the coastal zone in the 1990s: the example of United Kingdom coastal and estuarine directories and inventories. *International Wader Studies* 10: 69-72.

N.C. Davidson, JNCC, Monkstone House, City Road, Peterborough PE1 1JY, U.K. (Present address: Wetlands International, P.O. Box 471, 6700 AL Wageningen, The Netherlands).

Дэвидсон, Н. К. 1998. Информация для рационального использования прибрежной зоны в 1990-е гг. : пример справочников и инвентарей прибрежной зоны и зоны эстуариев Соединенного Королевства. *International Wader Studies* 10: 69-72.

Information in a form easy to for managers and decision-takers to use is a key pre-requisite for effective coastal zone management, as it is for sustainable management of wetlands and the species such as waders that depend on them. The coastal zone forms an important part of the overall wetland resource, a resource for which there is global and European conservation priority through EC Directives and international conventions, notably the Ramsar Convention and the more recent Convention on Biological Diversity. Coastal information provision tends to ignore this broader wetland context, for which there is also much inventory activity (see Frazier 1997 for a review) - better synergy between these activities is needed to ensure that integrated coastal management delivers the requirements of the maintenance of biological diversity, both for habitats and species.

This note summarises the range of comprehensive national inventories and directories that have been compiled to assist people in the United Kingdom involved in sustainable coastal management. Frazier (1997) has distinguished three type of wetland inventory worldwide. Most reported here are 'type 1' - comprehensive national inventories. Information relevant to UK coastal zones also exists in inventories falling into Frazier's (1997) other categories: type 2 international inventories of specific wetland types, here for example European-scale inventories of individual coastal habitats (Dijkema 1984; Doody 1992); and type 3 inventories of wetlands of special importance for conservation, notably the Ramsar *Directory of Wetlands of*

International Importance (Jones 1993; Frazier 1996). Only national-scale sources are summarised here: there are many other detailed compilations at more local and/or site scales, many of them using electronic map-based Geographical Information Systems at various levels of sophistication and success.

The range of national inventories and directories and their coverage is summarised in Table 1. Most of the inventories and directories listed in Table 1 have been developed by UK statutory environmental agencies and non-governmental bodies, but increasingly the inventories have become developed jointly between statutory environmental and conservation agencies and those needing to use the information, *e.g.* industry, local government planners and coastal managers.

Some inventories and directories have involved extensive baseline research and survey, and/or comprehensive repackaging of such baseline information. Others, such as *An inventory of UK estuaries* (Buck 1993-1997) have, however, been compiled as summaries from simple available information sources (Figure 1), offering a useful model for application in many places, including where information is scarce. This style of compilation is also useful for focusing attention on gaps in baseline knowledge.

Taken together, these inventories and directories provide much of the summarised and contextual information needed as a basis for developing

Table 1. A summary of compiled national information sources available for managing the UK's coastal zone.

Title	Geographical coverage ¹	Topic coverage	Published sources
The saltmarsh survey of Great Britain: an of British inventory saltmarshes	Great Britain	saltmarsh vegetation (grouped communities) (sites >0.5 ha)	Burd 1989
Sand dune survey of Great Britain	Scotland (sample survey only - survey of other sites in prep.), England, Wales	vegetation (National Vegetation Classification communities) on wind-blown sand	Dargie 1993, 1994
Vegetated shingle structures of Great Britain	England, Scotland, Wales	vegetation classification (National Vegetation Classification communities), vegetation distribution (part survey only on some large sites)	Sneddon & Randall 1993, 1994
Coastal Resources Database	Great Britain (by county)	shoreline length, intertidal area, coastal habitats	Coastal Conservation Branch 1993
Marine Nature Conservation Review (MNCR)	GB intertidal and subtidal inshore waters	benthic community classification, national and site-by-site community distribution	Hiscock 1996; Hill <i>et al.</i> 1996
<i>Atlas of the seas around the British Isles</i>	UK territorial waters	marine geology & geomorphology; oceanography; fish & fisheries; marine biology, birds & mammals	Lee & Ramster 1981
UKDMAP Second edition	UK territorial waters	marine geology & geomorphology; marine protected areas; oceanography; birds & mammals fish & fisheries; marine biology,	BODC 1992
<i>British coasts and seas: coastal and marine UKDMAP datasets</i>	Great Britain	estuaries, coastal habitats, marine survey sites, coastal Sites of Special Scientific Interest	Barne <i>et al.</i> 1994
<i>Nature Conservation and estuaries in Great Britain</i>	Great Britain estuaries	location, classification & size, habitats, species (invertebrates, marine communities, fish, amphibians & reptiles, birds, mammals), conservation status, human activities, land-claim, sea-level change	Davidson <i>et al.</i> 1991
An inventory of UK estuaries	UK estuaries (site-by-site)	as Davidson <i>et al.</i> (1991)	Buck 1993-1997; Davidson & Buck 1997
RSPB estuaries inventory	57 major UK estuaries	mapped locations of human activities, waterbird distributions	Peck 1993
<i>Directory of the North Sea Coastal Margin</i>	North Sea coasts of Scotland & England (E. of 50°W)	marine & coastal habitats, geology & geomorphology, fisheries, rare & protected species, other sources of information, site protection, human activities	Doody <i>et al.</i> 1993
<i>Coasts and seas of the United Kingdom (Coastal Directories)</i>	United Kingdom (in 17 coastal regions)	geology & physical environment, terrestrial coastal habitats, marine & estuarine habitats, important species (15 categories), history & archaeology, coastal protected sites, land use, infrastructure and coastal defence, human activities, coastal management. (Each topic includes information sources and quality, and contact names and addresses.)	Barne <i>et al.</i> 1995-1998 (16 volumes)
<i>Coasts and seas of the United Kingdom. Electronic version (Coastal Directories)</i>	United Kingdom (in 17 coastal regions)	as above	Barne <i>et al.</i> 1996-1998
<i>UK Coastal Management Directory</i>	UK	Contact points: local authorities, national government, agencies and NGOs	Bridge & Gee 1997

¹ A particular feature of information in the UK is that, owing to national administrative boundaries and the geographical responsibilities of government environment agencies, most information sources cover Great Britain (England, Scotland and Wales), the United Kingdom (Great Britain and Northern Ireland), or Ireland (the Republic of Ireland and Northern Ireland) rather than the whole British Isles.

- Bridge, L. & Gee, K. 1997. *UK Coastal Management Directory*. CoastNET, Manchester & National Coasts & Estuaries Advisory Group (NCEAG), Winchester.
- British Oceanographic Data Centre 1992. *United Kingdom Digital Marine Atlas. 2nd Edition*. NERC Proudman Oceanographic Laboratory, Bidston.
- Buck, A.L. 1993-1997. *An inventory of UK estuaries*. Vols. 2-7. Joint Nature Conservation Committee, Peterborough.
- Burd, F. 1989. The saltmarsh survey of Great Britain: an inventory of British saltmarshes. *Research & survey in nature conservation*, No. 17. Nature Conservancy Council, Peterborough.
- Coastal Conservation Branch 1993. Summary of data from the Coastal Resources Database. *CCB Information Note No. 7/93*. Joint Nature Conservation Committee, Peterborough.
- Dargie, T.C.D. 1993-1995. *Sand dune survey of Great Britain. Part 1 England; Part 2 Scotland; Part 3 Wales*. Joint Nature Conservation Committee, Peterborough.
- Davidson, N.C., Laffoley, D.d.A., Doody, J.P., Way, L.S., Gordon, J., Key, R., Drake, C.M., Pienkowski, M.W., Mitchell, R., & Duff, K.L. 1991. *Nature conservation and estuaries in Great Britain*. Nature Conservancy Council, Peterborough.
- Davidson, N.C. & Buck, A.L. 1997. *An inventory of UK estuaries. Vol. 1. Introduction and methodology*. Joint Nature Conservation Committee, Peterborough.
- Dijkema, K.S. (ed.) 1984. *Salt marshes in Europe*. Council of Europe, Strasbourg.
- Doody, J.P. (ed.) 1992. *Sand dune inventory of Europe*. Joint Nature Conservation Committee, Peterborough & European Union for Coastal Conservation, Leiden.
- Doody, J.P., Johnston, C. & Smith, B. 1993. *Directory of the North Sea Coastal Margin*. Joint Nature Conservation Committee, Peterborough.
- Frazier, S. 1996. *A directory of wetlands of international importance - an update*. Ramsar Convention Bureau, Gland.
- Frazier, S. 1997. Wetland inventories and databases: tools for determining priorities, identifying management needs and evaluating the success of conservation actions. In: J. van Vesseem (ed.), *Determining Priorities for Waterbird and Wetland Conservation. Proc. Workshop 4, International Conf. on Wetlands & Development, Kuala Lumpur, Malaysia, October 1995*, pp. 135-145.
- Hill, T.O., Emblow, C.S., Northen, K.O. & Connor, D. (eds.). 1996. *Marine Nature Conservation Review Sector 6, Inlets in eastern England. Area summaries*. Joint Nature Conservation Committee, Peterborough.
- Hiscock, K. (ed.) 1996. *Marine Nature Conservation Review: rationale and methods*. Joint Nature Conservation Committee, Peterborough.
- Jones, T. 1993. *A directory of Wetlands of International Importance. Part 3: Europe*. Ramsar Convention Bureau, Gland.
- King, G. & Bridge, L. 1994. *The Directory of Coastal Planning and Management Initiatives in England*. National Coasts & Estuaries Advisory Group, Maidstone.
- Lee, A.J. & Ramster, J.W. 1981. *Atlas of the seas around the British Isles*. MAFF, Lowestoft.
- Peck, K. 1993. Estuaries inventory - research towards a better understanding of the interactions between birds and human activities on UK estuaries. *RSPB Conservation Review 7*: 42-46.
- Sneddon, P. & Randall, R.E. 1993-1994. *Vegetated shingle structures of Great Britain. Main report; Appendix 1 - Wales; Appendix 2 - England; Appendix 3 - Scotland*. Joint Nature Conservation Committee, Peterborough.