iCoast: Marine recreational data collation and management
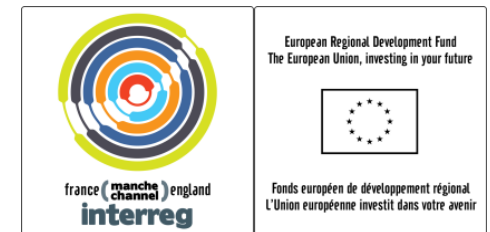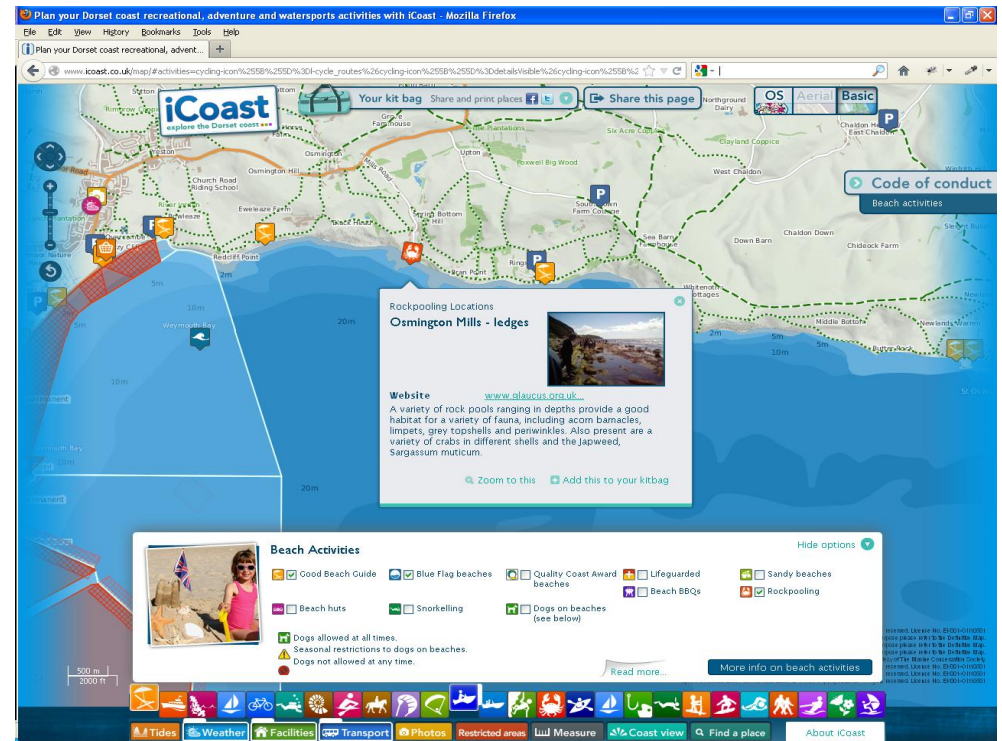
James Feaver
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Dorset Coast Forum

- Founded 1995
- Aim to promote a sustainable approach to management, use and development of Dorset's coast and inshore waters
- A partnership of 240 organisations, 650 individuals – national / local government, commercial organisations and the voluntary sector.
- Deliver innovative projects:
  - Dorset Coast Strategy internationally recognised and received a commendation from the Royal Town Planning Institute
  - The Dorset & East Devon World Heritage Site - *The Jurassic Coast*

What is iCoast?

Developed under C-SCOPE Interreg project.

Purpose
- Web site to plan recreational activities on the coast.
- "Soft" management of visitors:
  - Promoting less sensitive areas e.g. fossil hunting
  - Raising awareness of sensitive areas and affecting behaviour

Audience
- The public - local residents and visitors (day-trips and holidays)

Content
- Locations of recreational activities/businesses/clubs
- Transport / Weather / Facilities
- Restricted access areas / sensitive habitats
- Activity information - how, where, planning, safety
- Codes of Conduct - to ensure people use the coast sustainably

Developed
- Dorset Coast Forum – concepts, data, activity pages etc
- One Bright Space – website

File   Edit   View   History   Bookmarks   Tools   Help

Plan your Dorset coast recreational, advent...   +

www.icoast.co.uk/map/#activities=cycling-icon%255B%255D%3Dl-cycle_routes%26cycling-icon%255B%255D%3DdetailsVisible%26cycling-icon%255B%2

iCoast
explore the Dorset coast •••

Your kit bag   Share and print places 🇫 🇹 ▼   ➡ Share this page

OS   Aerial   Basic

Code of conduct

Beach activities

Rockpooling Locations

Osmington Mills - ledges

Website   www.glaucus.org.uk...

A variety of rock pools ranging in depths provide a good habitat for a variety of fauna, including acorn barnacles, limpets, grey topshells and periwinkles. Also present are a variety of crabs in different shells and the Japweed, Sargassum muticum.

🔍 Zoom to this   ➕ Add this to your kitbag

Beach Activities

Hide options ▼

☑ Good Beach Guide   ☑ Blue Flag beaches   ☐ Quality Coast Award beaches   ☐ Lifeguarded   ☐ Sandy beaches

☐ Beach huts   ☐ Snorkelling   ☐ Dogs on beaches (see below)   ☐ Beach BBQs   ☑ Rockpooling

Dogs allowed at all times.
⚠ Seasonal restrictions to dogs on beaches.
🚫 Dogs not allowed at any time.

Read more...   More info on beach activities

500 m
2000 ft

🌊 Tides   ☀ Weather   🏠 Facilities   🚌 Transport   📷 Photos   Restricted areas   📊 Measure   Coast view   🔍 Find a place   About iCoast

iCoast Data

- 111 recreational datasets covering 26 activities (where, tuition/tours, hire, clubs etc.)

Land
Cycling
Rock Climbing
Fossil Hunting
Horse Riding
Rockpooling
Walking

Sea
Boat Trips
Cruising
Diving
Gig Racing & Rowing
Kite Surfing
Personal Watercraft
Power Boating
Sailing

Sea Kayaking & Canoeing
Snorkelling
Stand up paddle boarding
Surfing
Swimming
Water skiing & wakeboarding
Windsurfing

Land & Sea
Angling
Beach Activities
Coasteering
Wildlife Watching

Air
Paragliding & Hang Gliding

- 20 other datasets – weather, facilities, transport etc

- Basemapping / aerial photography

- Gazetteers – land and sea

- Photography

Issues with collating marine recreational data (1)

MMO (2012). Compilation of spatial data on marine recreational activities. A report produced for the Marine Management Organisation, pp 94. MMO Project No: 1013.
http://www.marinemanagement.org.uk/evidence/documents/1013.pdf

- The data is both diverse and disparate.
- Few datasets with geographic information available nationally.
- Little systematically collated in a format that could be readily used.
- Broad range of bodies:

  - Central government
  - Government agencies
  - Councils
  - Inshore Fisheries and Conservation Authorities
  - NGO/Voluntary (Environmental)
  - Coastal Partnerships
  - Other local groups/government
  - Land/Seabed owners
  - Universities

  - Commercial Sector
  - Tourism industry
  - Sport management organisations
  - Recreation group/union/associations
  - Large recreation bodies
  - Local recreation centres/clubs
  - WebGISs of recreation activities
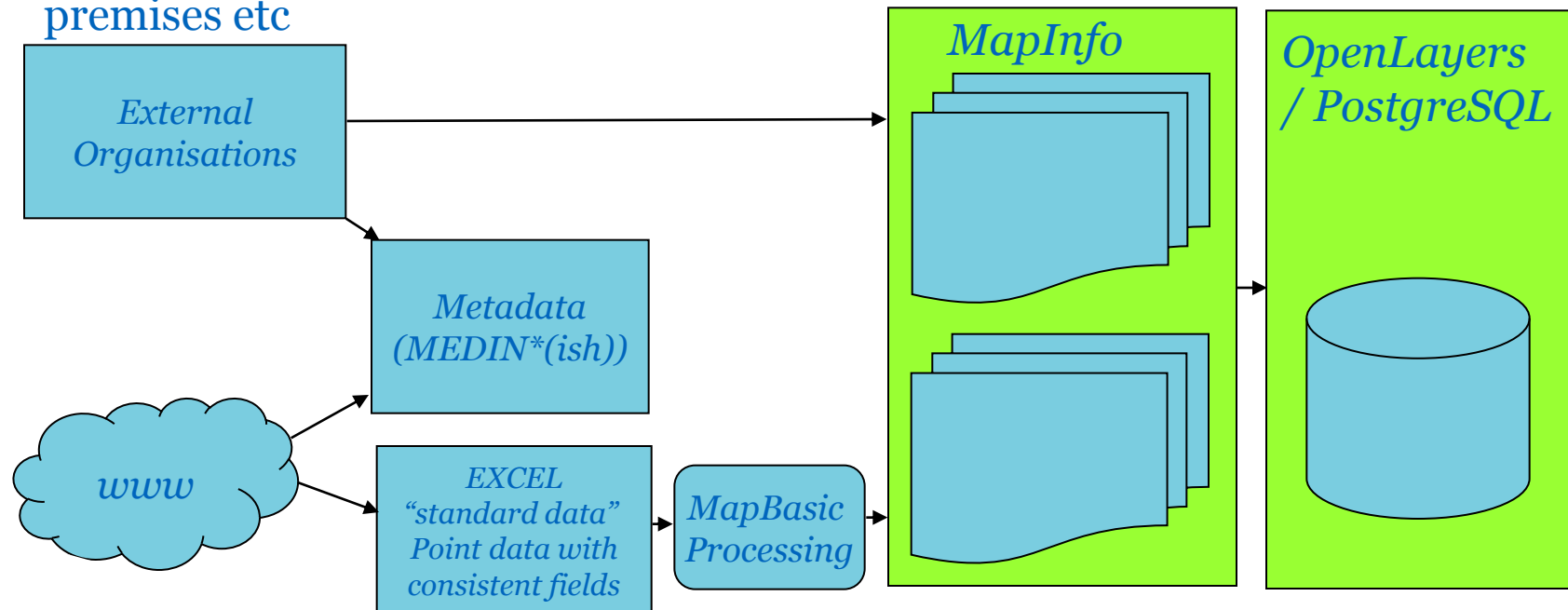 - Port and harbour authorities

Issues with collating marine recreational data (2)

- Above situation also found in other countries and commented upon in various reports (e.g. Landuse Consultants, 2004).
- Many studies are:
  - local or site-specific level
  - often for a single activity
  - one-off studies with no plans for renewal or update (e.g. Marine Conservation Zones)
  - dependent on funding from internal memberships
- Some information is not maintained on central databases and is part of local knowledge.
- Few standards, little metadata

iCoast Data Collation

1. Existing GIS data provided by external organisations e.g. The Royal Yachting Association, councils, Natural England, Sustrans, OceanWise
2. Existing "non GIS", digital data provided by external organisations e.g. The Marine Conservation Society, Councils
3. Collated by DCF from web sources (web sites, directories, forums) and workshops. Geo-referenced with maps, air photos, address data for premises etc

External Organisations

Metadata (MEDIN*(ish))

www

EXCEL "standard data" Point data with consistent fields

MapBasic Processing

MapInfo

OpenLayers / PostgreSQL

Marine Environmental Data & Information Network

iCoast Data Update

- Comprehensive "Data Management Guide"
- Updates supplied / applied for existing, external data
- Network of "activity champions" report changes
- Business owners report changes / make new requests
- Monthly link checking
  - Macros / MapBasic create HTML files of ALL external web site links
  - World Wide Web Consortium (W3C) Link Checker used
  - All broken links investigated
- Six monthly major data research and update exercise

Best Practice?

- Above is far from ideal

- Maintenance difficult / time-consuming

- Too many datasets collated by DCF – but was only option – "weight of DCF", budget, times

MMO (2012). Compilation of spatial data on marine recreational activities. A report produced for the Marine Management Organisation, pp 94. MMO Project No: 1013. http://www.marinemanagement.org.uk/evidence/documents/1013.pdf

- Is a need to enhance the quality of marine recreational data collection and data management.

- Clear that sharing guidance on data collection methods, and metadata creation for recreational activity data would be useful.

- Review has highlighted schemes which are using good practice.

- Recommended that a task group of national bodies and recreational groups meet to plan shared guidance. An integrated approach that reduces duplication but reaches the majority of stakeholders is also recommended.

Where next?

- New Marine Management Organisation project just starting (MMO1043 Recreational Activity Mapping) moving these recommendations forward.

- Objectives:

  – Aim - to create or enhance data which describes spatial trends in recreational activity throughout England.

  – Will work closely with national recreational bodies (or groups) to create and implement data standards (covering methods, data maintenance, data management, [spatial] confidence assessment and quality assurance).

  – Project will produce a strategic action plan (in liaison with national bodies) aimed at addressing data gaps to ensure high quality data availability at a national level. Will also provide guidance and advice on data licensing.

iCoast Demonstration

- www.icoast.co.uk
- m.icoast.co.uk

With special thanks to all our partners and funders