## 7. Nairobi Convention Clearinghouse Summary Report (Key collaborators, UNEP, ASCLME and all data producing marine institutes within South Africa)

The NCCH, or the "Nairobi Convention Clearinghouse and Information Sharing System" is a project initiated by UNEP's Division of Early Warning and Assessment. It started in February 2010 and is roughly half-way complete. Wayne Goschen was nominated country coordinator by DEAT and Gavin Fleming is managing the project.

The South African component of the NCCH is designed to provide a one-stop mechanism that promotes the advertising, discovery, access, dissemination and use of increasingly diverse and comprehensive marine and coastal data via the Internet. Through a clearinghouse and a Web interface, the system provides integration of information held by numerous departments, institutions and organisations to deal with the vast array of policy, management, scientific and other practical issues of the coastal and marine environment in South Africa.

The South Africa Clearinghouse mechanism constitutes the national platform for the NCCH and information sharing system. In essence, the goal of the NCCH is to improve the coordination and participation of South Africa in implementing the Convention for the protection, management and development of the marine and coastal environment of Eastern Africa Region.

The portal itself is at <a href="http://www.saeonocean.co.za/geonetwork">http://www.saeonocean.co.za/geonetwork</a>. The portal home page is shown in Figure 7.1.

The South Africa Clearinghouse Mechanism brings relevant information from diverse sources together in an organised and consistent manner using standards, guidelines and a common suite of tools and functions necessary to acquire, process, store, distribute and improve utilisation of environmental data. Data holdings range from geo-spatial to socioeconomic and environmental publications from national institutes, departments, environmental management authorities, maritime services, data gateways, and relevant databases.



Fig. 7.1: NCCH South Africa portal home page

The information network will enable South Africa to fully participate and benefit from lessons learned from national and cross-border activities. Nationals will readily access scientific, technical, environmental, legal and policy level information essential for the sustainable development. The Clearinghouse also acts as the national Node for the Global Programme of Action for protection of the marine environment from land-based pollution.

In South Africa, the Clearinghouse Mechanism is implemented by a multi-disciplinary network of departments and institutions coordinated by the South African Environmental Observation Network (SAEON). At the regional level the Nairobi Convention Clearinghouse is implemented by the Division of Early Warning and Assessment (DEWA) of the United Nations Environment Programme (UNEP) in close collaboration with the Nairobi Convention Secretariat, and the UNEP/GEF regional Project Addressing land based activities in the Western Indian Ocean (WIOLaB). Several regional partners are very supportive of the Clearinghouse initiative, among them the ODINAfrica (Ocean Data and Information Network for Africa) of IOC/UNESCO and RECOMAP (Regional Coastal Management Programme) of the Indian Ocean Commission.

Most South African organisations and projects involved with marine and coastal data management are represented on the NCCH working group or by editors on the portal.

- ACEP is represented by Wayne Goschen and has 43 records loaded from ACEP I.
- ASCLME is represented by Lucy Scott and Juliet Hermes and has three records loaded.
- Ezemvelo KZN wildlife has one record covering a benthic survey.
- East London Museum has one record covering their mollusc collection.
- MCM (DEA and DAFF) is represented by Larry Hutchings, Mike Roberts, Gavin Tutt, Fiona Cuff, Feroza Albertus-Stanley and Niel Malan and has four records describing linefish, copepod, seal and demersal surveys.
- SADCO, represented by Raymond Roman, Marten Grundlingh and Ursula von St Ange, has 100 records aggregated by year over 100 years covering all their station data holdings.
- SAIAB has one record.
- CSAG (Climate systems analysis group, UCT) has 185 records covering over 400 data sets representing climate forecast model outputs. The data sets are also being served by SAEON server.

Other organisations that are participating but for which metadata is not yet loaded include SANHO (Capt Abri Kampfer), IMT (Carl Wainman), IOI (Adnan Awad, Martin Cocks), DEA (National-Deon Marais), ORI/SWIOFP (Bernadine Everett), SABIF (Martin Cocks), SANBI (Martin Cocks), ACCESS (Neville Sweijd) and SAEON itself.

## Portal technical information

The portal is implemented in "GeoNetwork Open Source", a metadata clearinghouse and portal system that implements all the data formats, service interfaces and protocols that make its standards compliant and interoperable with the rest of the NCCH network and other catalogues around the world. Several customisations have been made to the 'off-the-shelf' portal, including headers, content, colours and page layout.

'Behind-the scenes' changes have been made, including many geonetwork configurations, including referencing a local GeoServer instance. The World map in the search interface and all the CSAG climate forecast layers are currently served locally. Users can upload or paste in existing metadata records in various standard formats or capture new records from scratch.

In addition to 'native' SAEON/NCCH records (for which a special icon was created), the portal can harvest metadata records from other portals to enable fast local searching. These metadata records cannot be edited but do appear in searches. At one point nearly 9000 such records were

harvested in the South African NCCH portal but many of these were poorly described with spatial extents and thematic keywords, resulting in many irrelevant records being returned in searches (based on admin experience and user feedback).

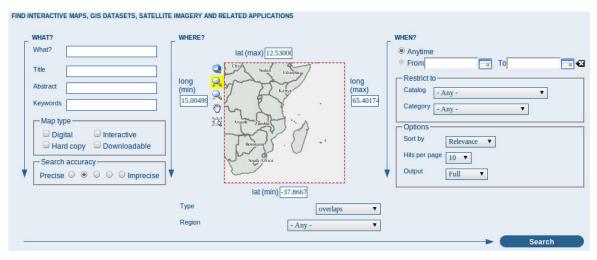


Fig. 7.2: NCCH portal advanced search form

Figure 7.3 shows the result of a search for 'molluscs'. One can then click on a result to show the whole metadata record, which in turn will provide links to the actual data if available.



Fig. 7.3: Results for search for 'molluscs'