

# Monitoring of invasive species in the Polish coastal waters

**Piotr Gruszka**

Department of Marine Ecology and Environmental Protection

Agricultural University of Szczecin

ul. Królewicza Kazimierza 3-4, Szczecin, POLAND

Following the Nature Protection Act and the Convention on Biological Diversity, **National Strategy of Conservation and Sustainable Use of Biological Diversity with the Action Agenda** was approved by the Polish Government on 25 February 2003.

Monitoring of biodiversity, and actual and potential threats to it, is the first of four strategic actions identified in the Strategy. Actions against alien species are a part of section “Environment”. One of the tasks in the Action Agenda for **2003-2006** under that section says about inventory and monitoring of alien species, with estimated costs of 200,000 PLN (about 50,000 Euro) per year.

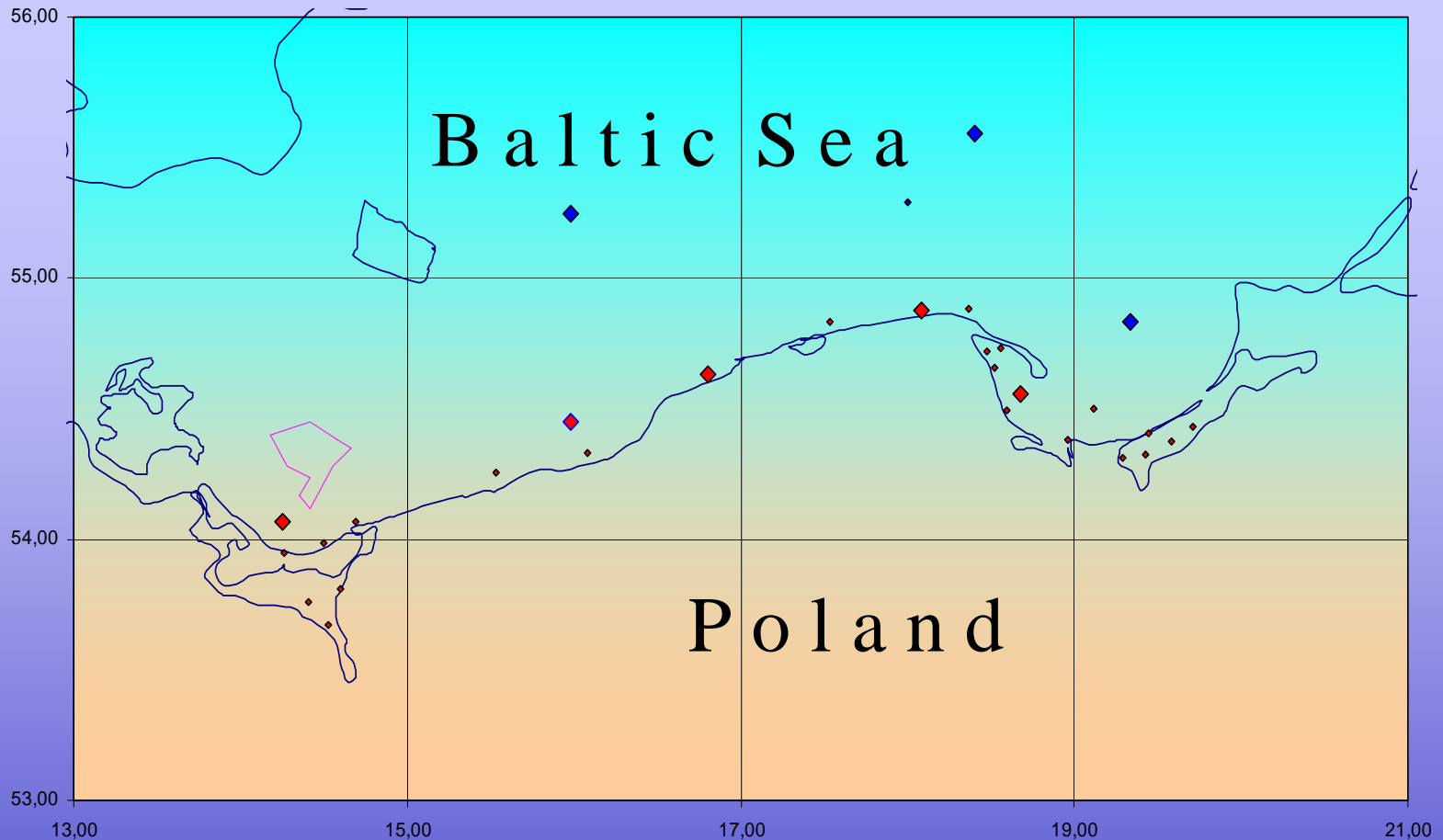
It is 2005 and realization of this task in Poland, especially with regard to the aquatic ecosystems, seems to be in the very early stage. Lack of well trained staff may be one of the reasons.

At least this problem does not exist in case of **the Sea Fisheries Institute (MIR) in Gdynia** – the first and main actor in monitoring the Baltic biota in Poland, monitoring that have been functioning long before above mentioned Strategy was created.

# Who is responsible for monitoring of coastal waters in Poland?

- Institute of Meteorology and Water Management, Maritime Division in Gdynia (the Sea Fisheries Institute does biological part) - **HELCOM COMBINE**,
- Regional Inspectorates of Environmental Protection (WIOS) in the coastal lagoons (e.g. Inspectorate in Szczecin is responsible for monitoring, also of some biological aspects\*, of the Polish side of the Szczecin Lagoon, and to less extent also of the Pomeranian Bay along the Polish-German border) - **State Environmental Monitoring.**

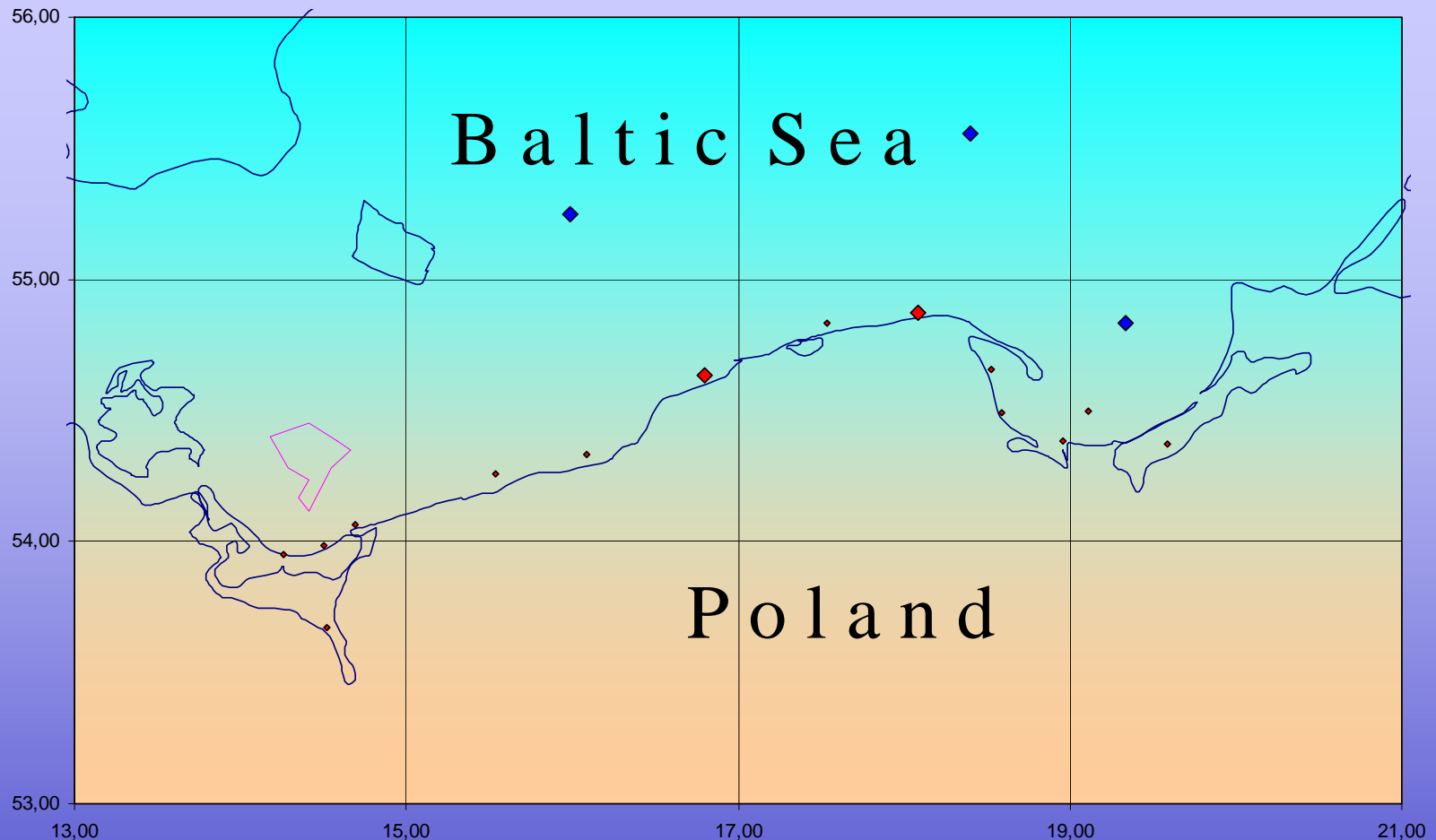
\* modified system of saprobes is used there



COMBINE stations in the Polish sea area (those in the territorial sea and the internal sea waters are marked in red, larger marks represent stations where benthos is sampled).

# COMBINE benthic stations in the Polish territorial sea and internal sea waters

<b>Station name</b>	<b>Location</b>	<b>Depth</b>	<b>Remarks</b>
<b>BMPK14/B13</b>	<b>Road of Swinoujscie harbour</b>	<b>13 m</b>	<b>Close to St. IV WIOS/STAUN</b>
<b>BMPK13</b>	<b>Area north of Koszalin</b>	<b>40 m</b>	<b>1 mile off EEZ</b>
<b>BMPK12</b>	<b>Near Ustka</b>	<b>20 m</b>	<b>also plankton!</b>
<b>BMPK11</b>	<b>Mouth of the river Piasnica area</b>	<b>17 m</b>	<b>also plankton!</b>
<b>BMPK10</b>	<b>Western Gulf of Gdansk</b>	<b>30 m</b>	<b>internal sea waters</b>



COMBINE stations where plankton is sampled in the Polish sea area (stations in the territorial sea and the internal sea waters are marked in red).

The Sea Fisheries Institute has established its own network of research stations in the Baltic, studying benthos also in the Szczecin Lagoon.

Other **scientific institutions** doing more or less regular research in (some parts of) the Polish coastal waters are:

- University of Szczecin,
- Agricultural University of Szczecin,
- Technical University of Koszalin,
- Pedagogical University of Slupsk,
- University of Gdansk,
- PAS Institute of Oceanology in Sopot,
- and some universities in cities located out of the coast (e.g. in Lodz and Olsztyn).

They concentrate mostly on benthos, rarely on fish or plankton.

It is obvious that some co-ordination would be of great advantage here.