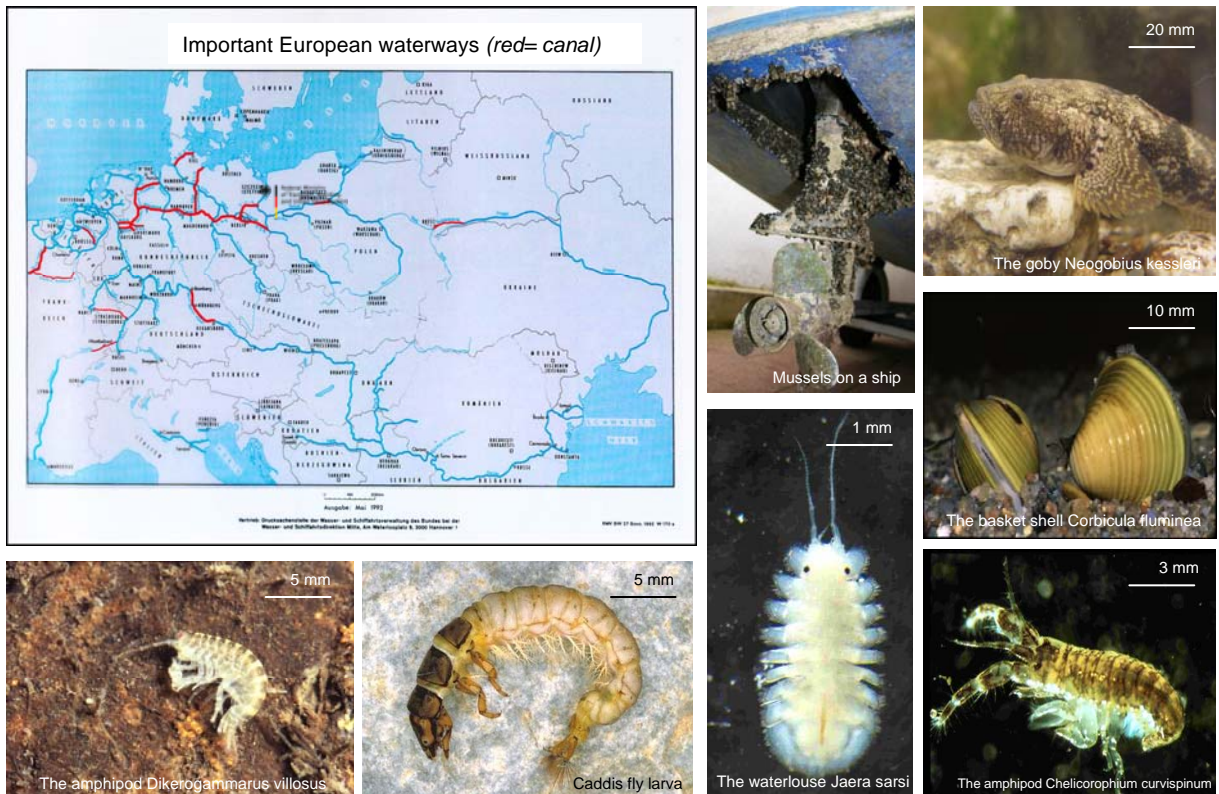


## Alien animal species (neozoa)



Neozoa (invasive species) are animals that have invaded since the beginning of the new era (1492 - discovery of America) an area that had previously been inaccessible to them and have established new populations there with direct or indirect support by human activities.

Flowing over long distances, watercourses provide excellent pathways for the dispersal of organisms. Moreover, when our network of navigable waterways was built over the past centuries, river basins that were originally separated became connected by canals.

Since then, species have been spreading beyond the limits of river basins either by active migration or as "passengers" on ships. The organisms preferentially attach themselves to the hulls of the ships.

The opening of the Main-Danube Canal in 1992 made it possible for many macrozoobenthic species (these are small invertebrates living on the bottom of waters) to spread beyond their original hydrogeographic areas. Numerous species, such as the polychaet *Hypania invalida*, the waterlouse *Jaera sarsi*, and the goby *Neogobius kessleri* were transported from the river Danube into the Rhine river system, whereas the basket shell *Corbicula fluminea* took the opposite route, namely from the river Rhine via the Main-Danube Canal into the Danube.