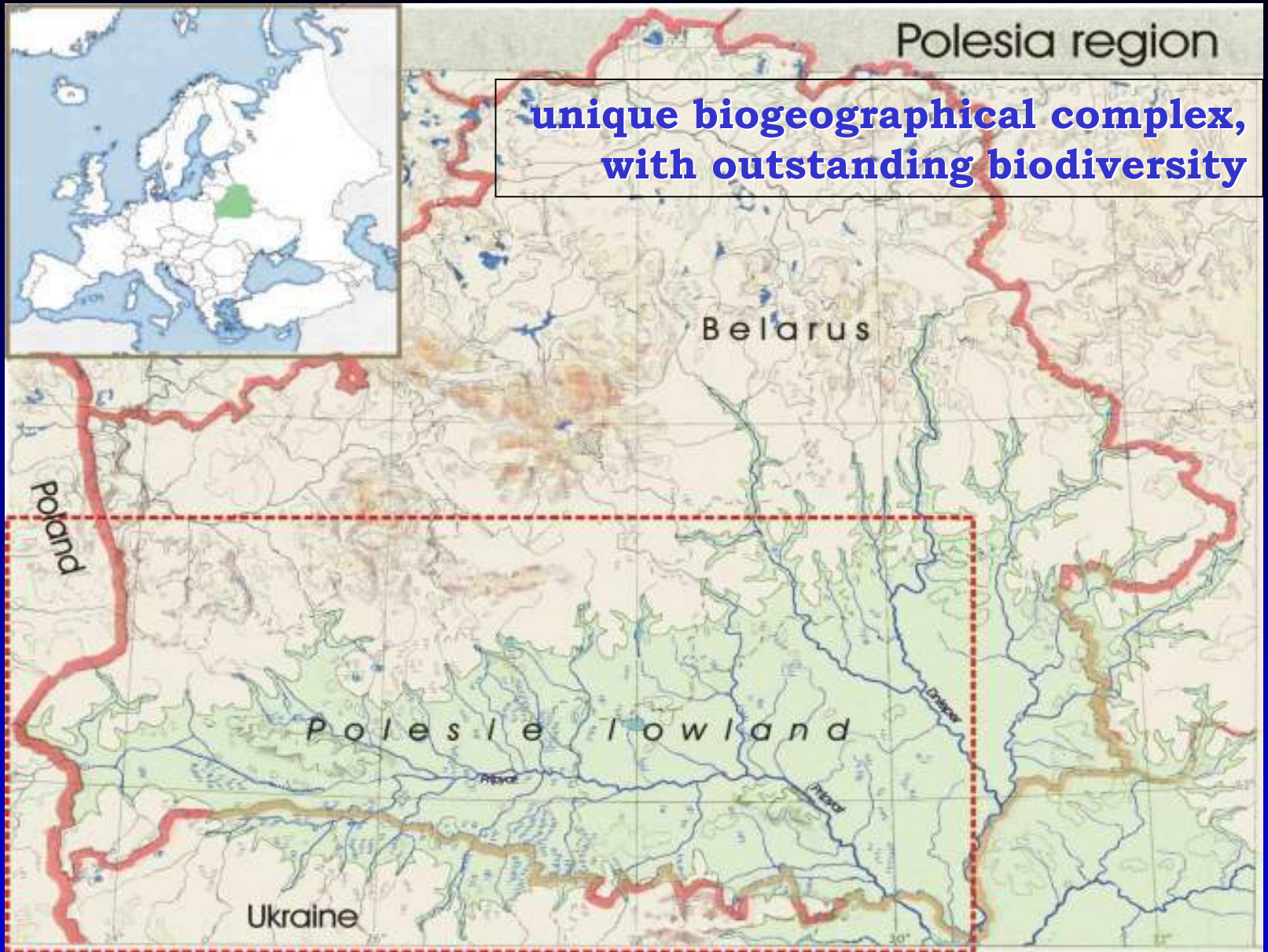




# **The effects of modifying hydro- morphology on ecology**

## **River Pripyat Case Study**

**for birds • for people • for ever**



# Mid- Pripyat River



# The Flood – hydro regime

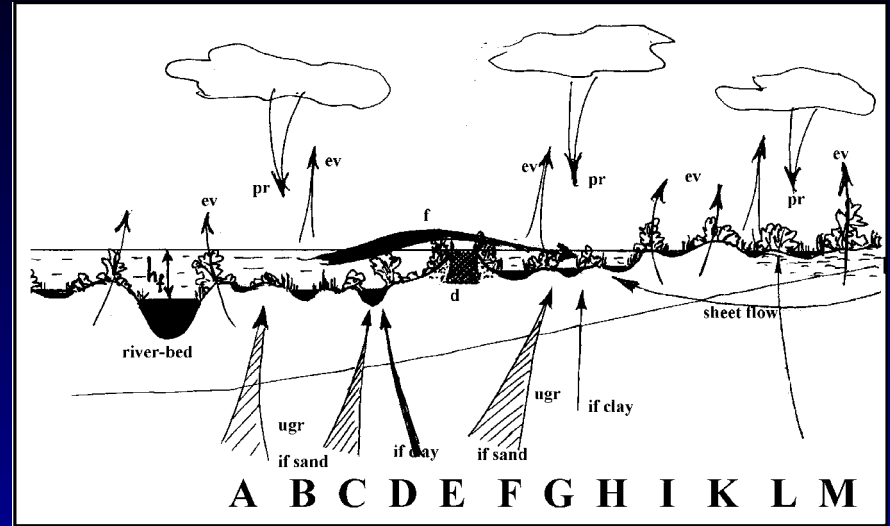
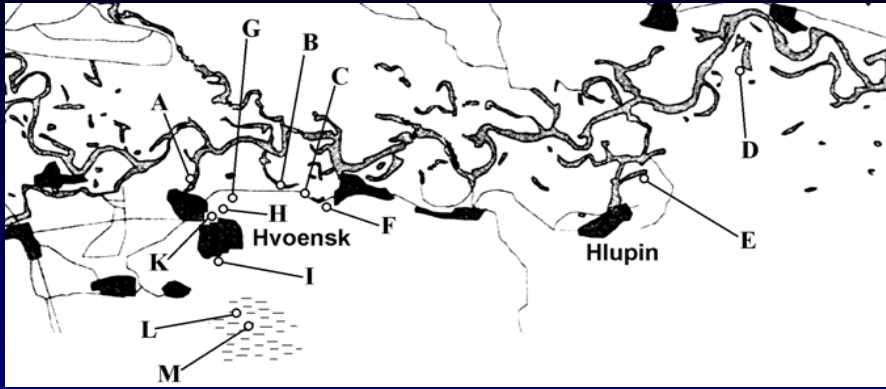


# Pripyat – main channel



# Back channels and oxbows





(Source: Institute of Zoology NAS Belarus report 200

# Wet meadows use by waders



# Floodplain forest – black alder





# Black storks

Shallow flooded areas for feeding

Alder woodland for nesting



# Fen mire – its role in river basin



# Role of other wetlands



# Effects of embanked polders



- Deeper more prolonged flooding
- Loss of shallow flooded margins
- Loss of storage capacity – increased flood risk



# Restoring hydro-morphology

## River basin planning

- o Good understanding of overall hydrological effects and the flood regime for particular river basin
- o Sufficient scale of restoration to enable geomorphological processes such as creation of back channels and pools
- o Sufficient hydrological links between restoration areas
- o Adequate links to areas of existing biodiversity
- o Importance of extreme events
- o Role of other habitats outside floodplain

## Design of sites

- o Sufficient topographic variation within the re-alignment area - shallow flooded areas
- o Adequate flow of water through the re-alignment site
- o Access for fish spawning- currents/ stranding

