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2.2 PP3 – IMB – Danube Delta, Ukraine

2.2.1 – Article title: *Post-invasion spread of Chinese sleeper (Perccottus glenii) in the Lower Danube drainage (Budjak region of Ukraine)*

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Abstract: The Chinese sleeper *Perccottus glenii* (Actinopterygii: Odontobutidae), is an invasive alien species (IAS) of fish that has been included into the European IAS list of Union Concern. The present study aims to describe the current distribution of Chinese sleeper in the Ukrainian Lower Danube drainage. Fish assemblage monitoring took place at 70 localities inside the Budjak historical region in south-western Ukraine over a twenty-year period (2001–2021), with Chinese sleeper occurrence confirmed at 24 localities. Our data not only confirm the spread of invasive Chinese sleeper within the Budjak region, but also outside the Danube basin, including the Sasyk Lagoon (2 ind.) and several overgrown banks along sea foreshore. Considering that Chinese sleeper are presently found in waterbodies intensively used as fisheries, in river forefront marshes and at one site outside the Danube basin, it is highly plausible that further expansion of this fish species will be observed in the near future.

Key words: invasive alien species, IAS of European concern list, odontobutids, nonnative range expansion

Introduction: Invasive Alien Species (IAS) are a growing problem worldwide, with many having been shown to have unexpected and unwanted impacts on native biodiversity and ecosystem services (chemical, physical or structural impact on ecosystems), local economies and/or human health (Mooney and Hobbs 2000; Roy et al. 2019; Gallardo et al. 2019). The main adverse impacts on native species noted to date are competition, predation, hybridisation, disease transmission, parasitism, poisoning/toxicity, bio-fouling, grazing/herbivory/browsing and negative interactions with other IAS (Blackburn et al. 2014; Roy et al. 2015). The European Strategy on IAS (Council of Europe 2003), finalised in 2003, utilises four main criteria to derive a ranked list of IAS within the European Union, i.e. likelihood of arrival, likelihood of establishment, likelihood of spread post-invasion and potential impact on biodiversity (Roy et al. 2015). The IAS list of Union Concern is updated every two years based on risk assessments proposed by the EU member states (European Commission 2014). (...)

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