Information required under Article 4(4) of Regulation No. 1143/2014

Invasive alien species shall only be included on the Union list if they meet all of the following criteria:

(a) they are found, based on available scientific evidence, to be alien to the territory of the Union excluding the outermost regions;

The American mink (*Neovison vison*) is native to North America: its natural range extends from Alaska and Canada through most of the United States, except a few southern regions as California, Nevada, Arizona, Utah, New-Mexico and West-Texas (Dunstone, 1993, Larivière 1999).

The species is present in most of Europe and is still spreading. The known distribution consist of the following countries in the EU: Austria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Poland, Portugal, Romania, Slovakia, Spain, Sweden, United Kingdom (Macdonald & Harrington 2003, Bonesi & Palazón 2007, Roy et al 2009, Zalewski et al 2010, Hegyeli & Kecskés 2015). Moreover, the species was recorded (without evidences of established populations) in Belgium, Hungary, Luxembourg, Netherland and Slovenia (Bonesi & Palazón 2007, Dekker & Hofmeester 2014). Escapes and deliberate releases from fur farms have been the main pathways for the establishment of feral populations.

(b) they are found, based on available scientific evidence, to be capable of establishing a viable population and spreading in the environment under current conditions and in foreseeable climate change conditions in one biogeographical region shared by more than two Member States or one marine subregion excluding their outermost regions;

American mink can be considered as an effective invader: it is an opportunistic predator with a high reproduction rate, it is capable to adapt to a number of habitat types, and juveniles can disperse long distances from their natal territories.

The species is spreading rapidly in Europe, being common in major part of the continent, from North (Finland, Sweden, and Norway) to South (Portugal, Spain) (Macdonald & Harrington 2003, Bonesi & Palazón 2007). Successful colonisation observed in very different climatic and landscape conditions suggests that the species may invade most of Europe in the nearest future unless appropriate measures are implemented. Thus, the species could establish in different biogeographic regions in the
EU such as Alpine, Baltic, Boreal, Continental, Atlantic, Mediterranean, Steppic, Pannonian and Black sea region. Following this, the American mink could become invasive in 9 countries in the EU where it is not known to exist (as an established population): Belgium, Bulgaria, Croatia, Cyprus, Hungary, Malta, the Netherlands, Luxembourg, and Slovenia. Further, a number of countries (e.g., Portugal – Rodrigues et al. 2015) have still locations free of American mink, and it is likely to invade to these areas as well.

Landscape features such as mountains may slow down but not stop the rate of colonisation (Zalewski et al 2009, Fraser et al 2013). The species can be successfully kept and bred in captivity (fur farms) and it may establish in a variety of habitats in the wild: rivers, streams, canals, wetlands, lakes and coastal areas. There is no evidence that the existence of competitors, predators or diseases will prevent the establishment of new populations.

(c) they are, based on available scientific evidence, likely to have a significant adverse impact on biodiversity or the related ecosystem services, and may also have an adverse impact on human health or the economy;

American mink is an invasive mammal with the highest impact on native species in Europe, affecting negatively at least 47 native species. Several of these species are considered as threatened (Genovesi et al. 2012).

Through ecological competition American mink affects negatively several native carnivores: for example, American mink is a direct cause of the extinction of the few last remaining populations of the European mink (Maran et al. 1998, Sidorovich & Macdonald 2001). It may also affect other small mustelids such as polecat (Barrientos 2015) and stoat (Sidorovich & Solovej 2007). Alien mink predation seriously damages waterfowl, small mammals, amphibians and fish across Europe (Barreto et al. 1998, Macdonald et al. 2002, Nordström et al. 2002, 2003, Ahola et al. 2006, Fischer et al. 2009, Melero et al. 2012). It may also launch small-scale trophic cascades, e.g. affecting plant biodiversity through its predation on voles (Fey et al. 2009).

American mink may cause damages to small livestock, preying on chickens, rabbits and other small domestic animals. Also, its presence in fish farms or fish ponds may cause economic damages (for example, some damages have been reported from Norwegian salmon farms and UK fresh water trout farms). Mink may also affect hunting reserves as a predator of rabbits and partridges. Economic losses related to conservation/control activities may be very high. Eradication and control of the species is generally costly, especially if the activity (eradication) covers a large area (Roy et al. 2009, Zabala et al. 2010, Roy 2011).

(d) it is demonstrated by a risk assessment carried out pursuant to Article 5(1) that concerted action at Union level is required to prevent their introduction, establishment or spread;
The Risk Assessment carried out shows clearly that there is a need for concrete action at EU level to prevent the potential introduction, establishment and spread.

Probability of entry, establishment and spread is carefully evaluated in the Risk Assessment. It is found that the lack of regulations demanding farms to take precautionary measures to avoid escapes in several European countries makes the likelihood of escapes very high and there is a need to elaborate means and methods to prevent mink escapes from farms. Preventing of American mink establishment in the wild and moving into new areas is a difficult task but well-planned conservation activities may prevent the colonization at a local level. Removal and control of the species has been successfully carried out at local level in different countries (UK, Spain, Finland, Estonia). EU-level coordinated action is required to prevent its expansion into the areas which still remain free of the American mink.

(e) it is likely that the inclusion on the Union list will effectively prevent, minimise or mitigate their adverse impact.

Including the American mink on the EU list of invasive alien species would help to prevent or at least, minimise, its adverse impact. Currently, control and eradication programs are on-going in several countries (Spain, UK, Poland) but to ensure effectiveness of those activities to reduce ecological damage, it is important that sufficient resources are provided to cover the costs. Funding available from the EU is an important mechanism to prevent the negative impact of the American mink in the areas.
REFERENCES:


