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Conservation Detection Dogs to Protect Europe's Native Biodiversity from Invasive Species

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Abstract : With dogs saving wildlife in New Zealand since 1890 and governments in Africa, Australia and Canada trusting them to give the best results, Conservation Dogs Ireland want to introduce more detection dogs to protect Europe's native wildlife. Conservation detection dogs are fast, portable and endlessly trainable. They are a cost-effective, highly sensitive and non-invasive way to detect protected and invasive species and wildlife disease. Conservation dogs find targets up to 40 times faster than any other method. They give results instantly, with near-perfect accuracy. They can search for multiple targets simultaneously, with no reduction in efficacy The European Red List indicates the decline in biodiversity has been most rapid in the past 50 years, and the risk of extinction never higher. Just two examples of major threats dogs are trained to tackle are: (I)Japanese Knotweed (Fallopia Japonica), not only a serious threat to ecosystems, crops, structures like bridges and roads - it can wipe out the entire value of a house. The property industry and homeowners are only just waking up to the full extent of the nightmare. When those working in construction on the roads move topsoil with a trace of Japanese Knotweed, it suffices to start a new colony. Japanese Knotweed grows up to 7cm a day. It can stay dormant and resprout after 20 years. In the UK, the cost of removing Japanese Knotweed from the London Olympic site in 2012 was around £70m (€83m). UK banks already no longer lend on a house that has Japanese Knotweed on-site. Legally, landowners are now obliged to excavate Japanese Knotweed and have it removed to a landfill. More and more, we see Japanese Knotweed grow where a new house has been constructed, and topsoil has been brought in. Conservation dogs are trained to detect small fragments of any part of the plant on sites and in topsoil. (II)Zebra mussels (Dreissena Polymorpha) are a threat to many waterways in the world. They colonize rivers, canals, docks, lakes, reservoirs, water pipes and cooling systems. They live up to 3 years and will release up to one million eggs each year. Zebra mussels attach to surfaces like rocks, anchors, boat hulls, intake pipes and boat engines. They cause changes in nutrient cycles, reduction of plankton and increased plant growth around lake edges, leading to the decline of Europe's native mussel and fish populations. There is no solution, only costly measures to keep it at bay. With many interconnected networks of waterways, they have spread uncontrollably. Conservation detection dogs detect the Zebra mussel from its early larvae stage, which is still invisible to the human eye. Detection dogs are more thorough and cost-effective than any other conservation method, and will greatly complement and speed up the work of biologists, surveyors, developers, ecologists and researchers.

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