remote sensing

Table S1 Detailed description of the vegetation dataset with number of presence records for IAS for Lazio and Molise.

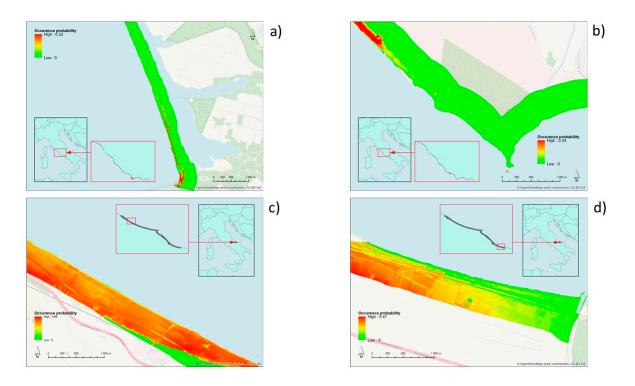|			Lazio	Molise
	Total plots		505	163
	Invaded plots		111	36
IAS	*Agave americana*	n. of presence records	30	-
	Carpobrotus acinaciformis		99	-
	Carpobrotus edulis		10	-
	Erigeron Canadensis L.		-	28
	Oenothera stucchii Soldano		-	12

Table S2 Detailed description of the land cover type with their relative attribution to EU – Habitat types. The CORINE land cover legend has been expanded to a fourth level of detail for natural and semi-natural cover types. The natural and semi-natural terrestrial cover types are in bold while the coastal dune habitats are signed by asterisks.

CORINE Code	CORINE Description	Detailed description	Abbreviations
1.	Artificial surfaces	Artificial areas including: urban fabrics; industrial, commercial and transport units; mine, dump and construction sites; artificial non agricultural vegetated areas.	ART
2.	Agricultural areas	Agricultural land, including: all types of arable land, permanent crops, pastures and heterogeneous agricultural areas.	AGR
3.1.2.1.	Reforestation	Reforestation on coastal dunes mainly with *Pinus*.	REF
3.2.3.1.	**Mediterranean macchia***	**Woody Dune Vegetation growing on fixed dune.** Includes the EU - Habitats: 2250 - *Fixed coastal dunes with *Juniperus* spp.; 2260 - *Cisto-Lavenduletalia* dune sclerophyllous scrubs.	**WDV**
3.2.4.1.	Semi-natural woody vegetation	Semi-natural woody vegetation: bushy vegetation with scattered trees. Can represent either fore dune woodland degradation or forest regeneration/recolonisation.	SWV
3.2.4.2.	Semi-natural herbaceous ruderal vegetation	Semi-natural herbaceous vegetation: abandoned meadows and pastures with different degree of degradation or recolonisation.	SHV
3.3.1.1.	**Open sand***	**Beach with Pioneer annual Vegetation.** Includes the EU - Habitat: 1210 - Annual vegetation of drift lines.	**BPV**
3.3.1.2.	**Partially vegetated dunes and densely vegetated dunes***	**Herbaceous Dune Vegetation growing on fore dune.** Includes the EU - Habitats: 2110 - Embryonic shifting dunes; 2120 - Shifting dunes along the shoreline with *Ammophila arenaria*; 2230 - *Malcolmietalia* dune grasslands.	**HDV**
4.1.1.	Inland marshes	Inland wetlands and marshes. Non forested areas of low lying land flooded by fresh stagnant or circulating water. Covered by low ligneous, semi-ligneous or herbaceous vegetation. Includes a fine mosaic of inland wetlands EU - Habitats.	WET

| 5.2. | Marine waters | Adriatic Sea. | SEA |

Figure S3 Invasive species occurrence probability predicted by the binomial GLM. The prediction models are obtained by the most parsimonious (i.e. lowest AIC) models selected by stepAIC function, by only including at least weakly significant terms. We decided to exclude highly insignificant terms as these only had negligible effect on model parameters but complicated the production of prediction maps (e.g. it is practically impossible to meaningfully interpolate species richness to a fine-resolution raster covering the whole area). In Lazio (Figs. A and B), this led to the model IS~ART^2+BPV^2+$dist\_roads^2$+$dist\_sea^2$+$elev^2$, with R^2 being 0.32. In Molise (Figs. C and D), the prediction model was IS~BPV + dist_roads + $elev^2$, with R^2 being 0.25. Two arbitrarily selected sample areas were chosen in both regions to show the spatial predictions.