

Distribution of Five Aquatic Plants Native to South America and Invasive Elsewhere under Current Climate

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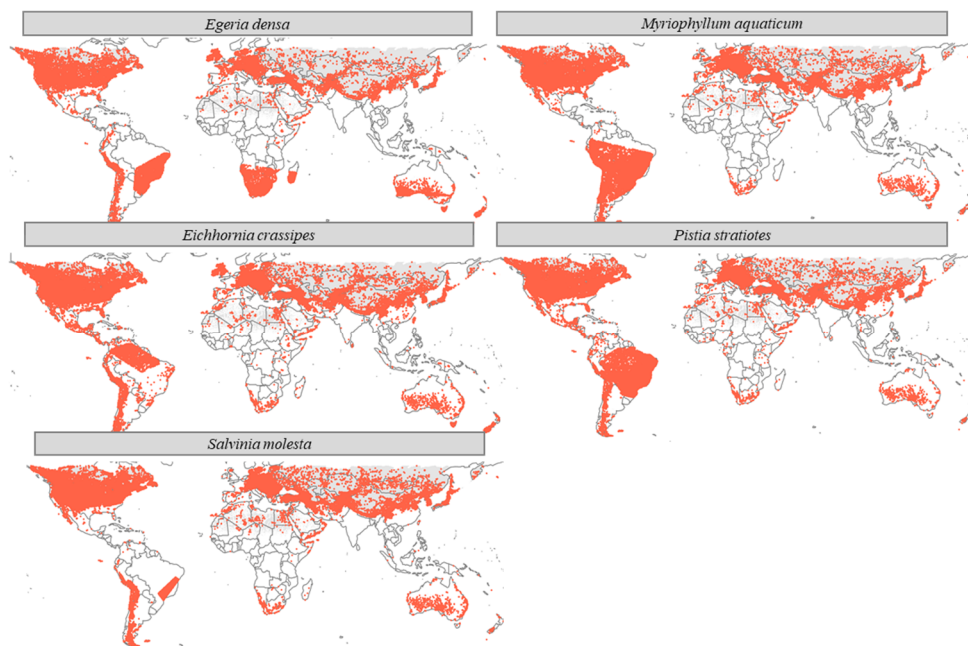


Figure S1. Selected background grid cells used in the modelling of *Egeria densa*, *Eichhornia crassipes*, *Myriophyllum aquaticum*, *Pistia stratiotes* and *Salvinia molesta*.

Table S1. Number of occurrences before (raw data) and after cleaning procedure and numbers of grid cells with presences used for modelling.

Species	Occurrences before cleaning procedure	Occurrences after cleaning procedure	Grid cells with recorded occurrences
<i>Egeria densa</i>	5,508	652	645
<i>Eichhornia crassipes</i>	22,544	3210	1077
<i>Myriophyllum aquaticum</i>	15,304	1485	637
<i>Pistia stratiotes</i>	18,004	1688	817
<i>Salvinia molesta</i>	5,740	704	237

Table S2. Summary of the cross-validation predictive performance (AUC and TSS) and variable importance of the fitted model algorithms and the ensemble (AUC-weighted average of the best performing seven algorithms) for five South American occurring elsewhere as invasive non-native species. Variable importances are given as percentages for Hydro6 (mean minimum temperature

of coldest month), Hydro10 (mean temperature of warmest quarter) and Hydro18 (precipitation of warmest quarter) and Global lakes and wetlands.

Species	Algorithm	TSS	ROC	Variable importance (%)			
				Minimum Upstream Temperature of Coldest Month	Mean Upstream Temperature of Warmest Quarter	Upstream Precipitation of Warmest Quarter	Global lakes and wetlands
<i>Egeria densa</i>	GLM	0.469	0.785	64.1	11.2	10.9	13.8
	GBM	0.61	0.869	57.2	25.4	8.4	9.1
	GAM	0.53	0.837	52.5	25.8	8.9	12.8
	CTA	0.548	0.82	51.2	28	8.8	12
	ANN	0.576	0.854	51.2	30.4	6.9	11.5
	FDA	0.499	0.818	56.9	14	6.4	22.6
	MARS	0.57	0.852	53.9	23.7	9.8	12.6
	RF	0.497	0.797	42.7	31.2	9.4	16.7
	MAXENT	0.584	0.861	50.4	25.8	10.1	13.6
	Ensemble	0.601	0.867	53.3	24.8	8.5	13.4
<i>Eichhornia crassipes</i>	GLM	0.768	0.933	72.1	19.4	6.6	2
	GBM	0.810	0.936	64.9	23	10.4	1.7
	GAM	0.791	0.935	64.8	23.9	10.1	1.2
	CTA	0.800	0.92	65.4	21.9	10.6	2.1
	ANN	0.810	0.937	59	27.9	9.8	3.3
	FDA	0.764	0.928	78.9	13.8	6.1	1.2
	MARS	0.790	0.936	63.6	23.3	11.7	1.4
	RF	0.790	0.886	54.4	24.7	14.7	6.2
	MAXENT	0.810	0.936	59.6	26.9	12.2	1.3
	Ensemble	0.800	0.939	66.1	22.6	9.6	1.7
<i>Myriophyllum aquaticum</i>	GLM	0.700	0.89	91.5	0.3	5.7	2.6
	GBM	0.739	0.92	86.1	3.5	9.4	0.9
	GAM	0.734	0.914	85.8	2.9	8.8	2.5
	CTA	0.720	0.879	81.2	6.9	11.1	0.8
	ANN	0.737	0.916	72.7	16	10	1.3
	FDA	0.693	0.892	91.5	0.9	5.2	2.4
	MARS	0.732	0.915	86	1.3	10.4	2.2
	RF	0.680	0.859	57.6	21.9	12	8.5
	MAXENT	0.736	0.919	81.6	4.4	11.1	3
	Ensemble	0.742	0.917	85	4.2	8.7	2.1
<i>Pistia stratiotes</i>	GLM	0.702	0.886	82.7	10.7	5.8	0.9
	GBM	0.790	0.91	84.2	4.3	10.5	1
	GAM	0.755	0.9	73.7	15.2	10.3	0.7
	CTA	0.713	0.861	87.3	2.1	9.2	1.4
	ANN	0.744	0.909	75.7	12.5	10.5	1.3
	FDA	0.682	0.891	30.6	63.8	4.7	0.9
	MARS	0.759	0.901	84.2	4.4	10.3	1.1
	RF	0.672	0.863	52.7	23.7	15.2	8.4

	MAXENT	0.735	0.904	59.1	24.6	14.2	2.1
	Ensemble	0.723	0.909	70.1	19.3	9.5	1.1
	GLM	0.808	0.955	88.6	4.4	5.7	1.2
	GBM	0.823	0.973	69.9	9.5	20.4	0.1
	GAM	0.829	0.973	78.8	10.2	10.6	0.4
	CTA	0.801	0.949	83.8	0.5	15.7	0
<i>Salvinia mo- lesta</i>	ANN	0.833	0.974	66.1	15.2	17.8	0.9
	FDA	0.765	0.965	82.5	8.1	9.4	0
	MARS	0.866	0.966	83.3	0	16.7	0
	RF	0.866	0.959	57.9	16.3	22.1	3.6
	MAXENT	0.819	0.975	63.7	11.8	23.5	1.1
	Ensemble	0.836	0.97	71.7	10.2	17.2	0.9