

Species Assessments

For 229 of the over 600 known species of crayfish, we found sufficient data to calculate the probability of each species becoming established once introduced, and becoming invasive once established using random forest (RFM) and/or logistic regression (LRM) models. Because RFM are more accurate than LRM, we recommend using the RFM-derived probabilities when available. For both models, the higher the probability, the greater the likelihood that the species will be able to become established or invasive. Global invasion status (N = not introduced, A = introduced but not established, E = established but not invasive and I = established and invasive) is provided as additional information.

Species	Global invasion status	RFM established probability	RFM invasive probability	LRM established probability	LRM invasive probability
<i>Astacoides betsileoensis</i>	N	0.608	0.355	–	–
<i>Astacoides caldwelli</i>	N	0.591	0.272	–	–
<i>Astacoides crosnieri</i>	N	0.444	0.057	–	–
<i>Astacoides granulimanus</i>	N	0.566	0.228	–	–
<i>Astacopsis franklinii</i>	N	0.393	0.067	–	–
<i>Astacopsis gouldi</i>	A	0.699	0.999	0.665	–
<i>Astacus astacus</i>	I	0.685	0.460	0.726	0.468
<i>Astacus leptodactylus</i>	I	0.816	0.900	0.842	0.753
<i>Astacus pachypus</i>	N	0.372	0.041	–	–
<i>Austropotamobius pallipes</i>	E	0.512	0.091	0.709	0.315
<i>Austropotamobius torrentium</i>	N	0.493	0.071	0.635	0.326
<i>Barbicambarus cornutus</i>	N	0.553	0.309	–	–
<i>Cambarellus chapalonus</i>	N	0.469	0.041	–	–
<i>Cambarellus chihuahuae</i>	N	0.549	0.043	–	–
<i>Cambarellus diminutus</i>	N	0.419	0.030	–	–
<i>Cambarellus montezumae</i>	A	0.507	0.068	0.672	0.307
<i>Cambarellus ninae</i>	N	0.528	0.041	–	–
<i>Cambarellus prolixus</i>	N	0.585	0.047	–	–
<i>Cambarellus puer</i>	N	0.769	0.063	0.759	0.315
<i>Cambarellus schmitti</i>	N	0.420	0.031	–	–
<i>Cambarellus shufeldtii</i>	E	0.775	0.063	0.765	0.319
<i>Cambarellus texanus</i>	N	0.466	0.034	–	–
<i>Cambaroides japonicus</i>	N	0.470	0.049	–	–
<i>Cambaroides schrenckii</i>	N	0.665	0.156	–	–
<i>Cambaroides similis</i>	N	0.791	0.204	–	–
<i>Cambarus acanthura</i>	N	0.779	0.235	0.741	0.364
<i>Cambarus acuminatus</i>	N	0.693	0.144	–	–
<i>Cambarus bartonii</i>	N	0.475	0.067	0.673	0.338
<i>Cambarus batchi</i>	N	0.354	0.031	–	–
<i>Cambarus bouchardi</i>	N	0.684	0.140	–	–
<i>Cambarus brimleyorum</i>	N	0.484	0.061	0.624	0.279
<i>Cambarus carinirostris</i>	N	0.393	0.041	–	–
<i>Cambarus carolinus</i>	N	0.418	0.041	–	–
<i>Cambarus chasmodactylus</i>	N	0.400	0.043	0.606	0.318
<i>Cambarus conasaugaensis</i>	N	0.428	0.042	0.638	0.273
<i>Cambarus coosae</i>	N	0.567	0.095	0.629	0.284
<i>Cambarus coosawattae</i>	N	0.516	0.059	–	–

<i>Cambarus cumberlandensis</i>	E	0.614	0.179	0.629	0.333
<i>Cambarus cymatilis</i>	N	0.350	0.029	–	–
<i>Cambarus diogenes</i>	N	0.856	0.761	0.743	0.755
<i>Cambarus dubius</i>	N	0.452	0.055	0.658	0.292
<i>Cambarus eeseehohensis</i>	N	0.454	0.054	–	–
<i>Cambarus elkensis</i>	N	0.486	0.064	0.606	0.281
<i>Cambarus fasciatus</i>	N	0.648	0.182	–	–
<i>Cambarus friaufi</i>	N	0.433	0.036	–	–
<i>Cambarus georgiae</i>	N	0.491	0.048	0.628	0.282
<i>Cambarus girardianus</i>	N	0.650	0.141	0.624	0.292
<i>Cambarus halli</i>	N	0.664	0.134	0.676	0.299
<i>Cambarus hiwasseensis</i>	N	0.434	0.045	–	–
<i>Cambarus hobbsorum</i>	N	0.360	0.032	–	–
<i>Cambarus howardi</i>	N	0.490	0.055	0.636	0.286
<i>Cambarus hubbsi</i>	N	0.541	0.064	–	–
<i>Cambarus hubrichti</i>	N	0.386	0.037	–	–
<i>Cambarus jezerinaci</i>	N	0.552	0.068	–	–
<i>Cambarus latimanus</i>	N	0.444	0.065	0.632	0.375
<i>Cambarus lenati</i>	N	0.481	0.050	–	–
<i>Cambarus longirostris</i>	A	0.412	0.042	0.607	0.325
<i>Cambarus longulus</i>	N	0.617	0.073	0.634	0.311
<i>Cambarus maculatus</i>	N	0.511	0.072	–	–
<i>Cambarus nodosus</i>	N	0.384	0.034	0.649	0.288
<i>Cambarus ortmanni</i>	N	0.350	0.030	–	–
<i>Cambarus parrishi</i>	N	0.522	0.064	–	–
<i>Cambarus polychromatus</i>	N	0.405	0.048	–	–
<i>Cambarus reflexus</i>	N	0.432	0.043	0.640	0.275
<i>Cambarus robustus</i>	A	0.560	0.146	0.635	0.407
<i>Cambarus rusticiformis</i>	N	0.406	0.037	–	–
<i>Cambarus sciotensis</i>	N	0.449	0.064	–	–
<i>Cambarus scotti</i>	N	0.739	0.242	0.720	0.303
<i>Cambarus smilax</i>	N	0.519	0.074	–	–
<i>Cambarus striatus</i>	N	0.344	0.029	–	–
<i>Cambarus strigosus</i>	N	0.402	0.037	–	–
<i>Cambarus tenebrosus</i>	N	0.587	0.185	–	–
<i>Cambarus thomai</i>	E	0.676	0.234	0.679	0.291
<i>Cambarus unestami</i>	N	0.628	0.115	–	–
<i>Cherax boesemani</i>	N	0.416	0.049	–	–
<i>Cherax cainii</i>	I	0.655	0.969	0.720	0.630
<i>Cherax destructor</i>	I	0.742	0.583	0.826	0.603
<i>Cherax glaber</i>	N	0.406	0.041	–	–
<i>Cherax lorentzi</i>	N	0.407	0.048	–	–
<i>Cherax peknyi</i>	N	0.422	0.051	–	–
<i>Cherax preissii</i>	N	0.416	0.042	–	–
<i>Cherax quadricarinatus</i>	I	0.950	0.999	0.830	0.768
<i>Cherax quinquecarinatus</i>	N	0.764	0.506	0.797	0.602
<i>Distocambarus carlsoni</i>	N	0.386	0.034	–	–
<i>Engaeus australis</i>	N	0.381	0.033	–	–
<i>Engaeus cisternarius</i>	N	0.480	0.049	–	–
<i>Engaeus cunicularius</i>	N	0.424	0.040	–	–

<i>Engaeus fossor</i>	N	0.534	0.061	–	–
<i>Engaeus fultoni</i>	N	0.397	0.034	–	–
<i>Engaeus hemircirratulus</i>	N	0.396	0.038	–	–
<i>Engaeus karnanga</i>	N	0.426	0.038	–	–
<i>Engaeus laevis</i>	N	0.811	0.107	–	–
<i>Engaeus lengana</i>	N	0.530	0.042	–	–
<i>Engaeus leptorhynchus</i>	N	0.528	0.061	–	–
<i>Engaeus nulloprius</i>	N	0.397	0.034	–	–
<i>Engaeus orientalis</i>	N	0.381	0.032	–	–
<i>Engaeus quadrimanus</i>	N	0.383	0.034	–	–
<i>Engaeus sternalis</i>	N	0.416	0.035	–	–
<i>Engaeus tuberculatus</i>	N	0.447	0.045	–	–
<i>Engaeus urostrictus</i>	N	0.456	0.038	–	–
<i>Engaewa similis</i>	N	0.407	0.034	–	–
<i>Engaewa walpolea</i>	N	0.399	0.031	–	–
<i>Euastacus armatus</i>	N	0.681	0.986	–	–
<i>Euastacus australasiensis</i>	N	0.478	0.087	–	–
<i>Euastacus bispinosus</i>	A	0.707	0.940	0.695	–
<i>Euastacus clarkae</i>	N	0.496	0.059	–	–
<i>Euastacus claytoni</i>	N	0.468	0.081	–	–
<i>Euastacus dalagarbe</i>	N	0.390	0.036	–	–
<i>Euastacus dangadi</i>	N	0.482	0.068	–	–
<i>Euastacus dharawalus</i>	N	0.752	0.606	–	–
<i>Euastacus fleckeri</i>	N	0.434	0.112	–	–
<i>Euastacus gumar</i>	N	0.477	0.059	–	–
<i>Euastacus hirsutus</i>	N	0.428	0.052	–	–
<i>Euastacus jagara</i>	N	0.421	0.047	–	–
<i>Euastacus kershawi</i>	N	0.692	0.979	–	–
<i>Euastacus mirangudjin</i>	N	0.452	0.051	–	–
<i>Euastacus pilosus</i>	N	0.481	0.059	–	–
<i>Euastacus polysetosus</i>	N	0.389	0.044	–	–
<i>Euastacus reductus</i>	N	0.412	0.041	–	–
<i>Euastacus setosus</i>	N	0.400	0.038	–	–
<i>Euastacus simplex</i>	N	0.446	0.072	–	–
<i>Euastacus spinichelatus</i>	N	0.376	0.035	–	–
<i>Euastacus spinifer</i>	N	0.688	0.925	0.682	–
<i>Euastacus sulcatus</i>	N	0.405	0.064	–	–
<i>Euastacus suttoni</i>	N	0.472	0.113	–	–
<i>Euastacus urospinosus</i>	N	0.471	0.068	–	–
<i>Euastacus yanga</i>	N	0.462	0.093	–	–
<i>Euastacus yarraensis</i>	N	0.392	0.047	–	–
<i>Fallicambarus caesius</i>	N	0.405	0.036	–	–
<i>Fallicambarus fodiens</i>	N	0.615	0.120	–	–
<i>Fallicambarus gilpini</i>	N	0.411	0.036	–	–
<i>Fallicambarus gordonii</i>	N	0.407	0.037	–	–
<i>Faxonella clypeata</i>	A	0.393	0.033	0.628	–
<i>Gramastacus insolitus</i>	N	0.578	0.050	–	–
<i>Ombrastacoides huonensis</i>	N	0.485	0.053	–	–
<i>Orconectes alabamensis</i>	N	0.605	0.087	0.704	0.293
<i>Orconectes australis</i>	N	0.438	0.051	–	–

<i>Orconectes barri</i>	N	0.397	0.032	–	–
<i>Orconectes bisectus</i>	N	0.913	0.310	–	–
<i>Orconectes causeyi</i>	I	0.985	0.998	0.838	0.751
<i>Orconectes chickasawae</i>	N	0.731	0.195	0.763	0.305
<i>Orconectes compressus</i>	N	0.490	0.043	–	–
<i>Orconectes cristavarius</i>	N	0.517	0.067	0.702	0.293
<i>Orconectes durelli</i>	N	0.557	0.069	–	–
<i>Orconectes erichsonianus</i>	N	0.750	0.299	0.813	0.331
<i>Orconectes etneri</i>	N	0.698	0.117	0.717	0.300
<i>Orconectes eupunctus</i>	N	0.539	0.060	0.712	0.300
<i>Orconectes hylas</i>	I	0.790	0.156	0.800	0.365
<i>Orconectes illinoiensis</i>	N	0.588	0.101	0.663	0.316
<i>Orconectes immunis</i>	I	0.876	0.637	0.869	0.683
<i>Orconectes indianensis</i>	N	0.693	0.127	0.717	0.299
<i>Orconectes inermis</i>	N	0.470	0.051	–	–
<i>Orconectes jonesi</i>	N	0.538	0.058	0.703	0.293
<i>Orconectes juvenilis</i>	I	0.597	0.079	0.699	0.288
<i>Orconectes kentuckiensis</i>	N	0.739	0.176	0.804	0.307
<i>Orconectes lancifer</i>	N	0.946	0.707	0.807	0.644
<i>Orconectes limosus</i>	I	0.780	0.653	0.846	0.726
<i>Orconectes luteus</i>	N	0.808	0.210	0.794	0.404
<i>Orconectes macrus</i>	N	0.531	0.045	0.694	0.297
<i>Orconectes marchandi</i>	N	0.538	0.064	–	–
<i>Orconectes margorectus</i>	N	0.825	0.391	–	–
<i>Orconectes meeki</i>	N	0.780	0.373	–	–
<i>Orconectes mississippiensis</i>	N	0.777	0.213	–	–
<i>Orconectes neglectus</i>	I	0.945	0.592	0.776	0.634
<i>Orconectes obscurus</i>	I	0.497	0.065	0.701	0.303
<i>Orconectes ozarkae</i>	N	0.850	0.309	0.785	0.435
<i>Orconectes pagei</i>	N	0.515	0.059	0.676	0.295
<i>Orconectes palmeri</i>	E	0.748	0.310	0.817	0.356
<i>Orconectes peruncus</i>	N	0.605	0.070	–	–
<i>Orconectes placidus</i>	A	0.893	0.609	0.776	0.654
<i>Orconectes propinquus</i>	I	0.747	0.198	0.816	0.325
<i>Orconectes putnami</i>	N	0.632	0.101	0.694	0.280
<i>Orconectes quadruncus</i>	N	0.480	0.050	–	–
<i>Orconectes rafinesquei</i>	N	0.824	0.245	0.808	0.409
<i>Orconectes ronaldi</i>	N	0.561	0.174	–	–
<i>Orconectes rusticus</i>	I	0.841	0.715	0.876	0.772
<i>Orconectes sanbornii</i>	E	0.550	0.070	0.692	0.284
<i>Orconectes sheltae</i>	N	0.375	0.031	–	–
<i>Orconectes spinosus</i>	N	0.765	0.210	0.780	0.305
<i>Orconectes stannardi</i>	N	0.629	0.107	–	–
<i>Orconectes theaphionensis</i>	N	0.525	0.069	–	–
<i>Orconectes tricuspis</i>	N	0.599	0.072	0.717	0.286
<i>Orconectes validus</i>	N	0.644	0.125	0.711	0.297
<i>Orconectes virilis</i>	I	0.907	0.875	0.843	0.771
<i>Pacifastacus fortis</i>	N	0.409	0.047	–	–
<i>Pacifastacus leniusculus</i>	I	0.848	0.670	0.800	0.716
<i>Paranephrops planifrons</i>	N	0.480	0.097	–	–

<i>Parastacus brasiliensis</i>	N	0.403	0.039	–	–
<i>Parastacus defossus</i>	N	0.403	0.036	–	–
<i>Parastacus nicoleti</i>	N	0.407	0.041	–	–
<i>Parastacus pugnax</i>	N	0.413	0.047	–	–
<i>Procambarus acanthophorus</i>	N	0.958	0.520	–	–
<i>Procambarus acutus</i>	E	0.842	0.684	0.788	0.719
<i>Procambarus advena</i>	N	0.472	0.053	0.659	0.299
<i>Procambarus alleni</i>	A	0.860	0.391	0.737	0.456
<i>Procambarus barbatus</i>	N	0.807	0.184	0.742	0.404
<i>Procambarus braswelli</i>	N	0.608	0.074	–	–
<i>Procambarus caritus</i>	N	0.434	0.043	0.648	0.273
<i>Procambarus cavernicola</i>	N	0.380	0.034	–	–
<i>Procambarus clarkii</i>	I	0.999	1.000	0.806	0.757
<i>Procambarus cubensis</i>	N	0.709	0.084	–	–
<i>Procambarus enoplosternum</i>	N	0.637	0.146	0.655	0.287
<i>Procambarus fallax</i>	I	0.990	0.889	0.785	0.660
<i>Procambarus hagenianus</i>	N	0.380	0.035	–	–
<i>Procambarus hayi</i>	N	0.628	0.287	0.649	0.406
<i>Procambarus hinei</i>	N	0.538	0.047	–	–
<i>Procambarus howellae</i>	N	0.518	0.075	0.659	0.287
<i>Procambarus leonensis</i>	N	0.858	0.512	0.768	0.592
<i>Procambarus llamasi</i>	N	0.973	0.869	–	–
<i>Procambarus lunzi</i>	N	0.475	0.052	–	–
<i>Procambarus paeninsulanus</i>	N	0.760	0.325	0.791	0.374
<i>Procambarus pallidus</i>	N	0.537	0.073	–	–
<i>Procambarus pearsei</i>	N	0.481	0.048	–	–
<i>Procambarus pubescens</i>	N	0.768	0.473	0.782	0.575
<i>Procambarus pubischelae</i>	N	0.672	0.093	0.678	0.295
<i>Procambarus pygmaeus</i>	N	0.400	0.034	0.668	0.294
<i>Procambarus raneyi</i>	N	0.774	0.433	–	–
<i>Procambarus regiomontanus</i>	N	0.517	0.076	–	–
<i>Procambarus seminolae</i>	A	0.640	0.137	0.608	0.322
<i>Procambarus spiculifer</i>	N	0.635	0.297	0.690	0.386
<i>Procambarus suttkusi</i>	N	0.609	0.145	–	–
<i>Procambarus talpoides</i>	N	0.520	0.068	0.683	0.283
<i>Procambarus truculentus</i>	N	0.390	0.035	–	–
<i>Procambarus zihuatlensis</i>	N	0.948	0.391	–	–
<i>Procambarus zonangulus</i>	I	0.964	0.933	0.793	0.650
<i>Samastacus spinifrons</i>	N	0.526	0.114	–	–
<i>Spinastacoides inermis</i>	N	0.527	0.051	–	–
<i>Spinastacoides insignis</i>	N	0.559	0.051	–	–
<i>Virilastacus rucapihuelensis</i>	N	0.436	0.041	–	–