

SUPPLEMENTARY INFORMATION

The educational community and its knowledge and perceptions of native and invasive alien species

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Appendix S1. Questionnaire

Appendix S2. Responses to the questionnaire

Appendix S3. Preliminary and complementary studies on species recognition

Appendix S1. Questionnaire (Translated from Spanish)

I. Characterisation of the respondent

1. Age: _____
2. Where do you live? (Province, Department/State, City) _____
3. Are you related to the teaching field? ☐ Yes, I am a teacher ☐ Yes, I am a student of a teaching career
☐ Yes, I am a retired teacher ☐ No ☐ Others _____
4. Which education level do you have? (Qualifications) ☐ Incomplete Secondary School ☐ Complete Secondary School ☐ Incomplete University ☐ University graduate ☐ Incomplete Postgraduate University ☐ Complete Postgraduate University
5. How long have you been teaching? _____
6. Indicate where do/did you teach? (You can choose more than one) ☐ Kindergarten ☐ Primary School
☐ Secondary School ☐ University ☐ Special Education ☐ Others _____
7. In which area/s did/do/will you teach? (You can choose one or more options) ☐ Mathematics ☐ Literature
☐ Natural Science ☐ Social Science ☐ Art ☐ Physical Education ☐ Foreign language ☐ Others _____
8. Are you a member or do you participate in any NGE0 (non-governmental environmental organizations)? ☐ Yes ☐ No ☐ Others _____
9. Have you ever visited a protected area, such as a municipal/provincial/national reserve or park? How often did you or do visit it? ☐ Yes, weekly ☐ Yes, monthly ☐ Yes, several times a year ☐ Yes, at least once a year
☐ Yes, every 3-5 years ☐ Never ☐ Others _____
10. Do you do or do you like to do sports or outdoor recreational activities? (You can choose more than one option) ☐ Fishing ☐ Hunting ☐ Nautical sports ☐ Gardening/Horticulture ☐ Wildlife watching (i. e., bird-watching)
☐ Outdoor walks ☐ I do not do outdoor activities ☐ Others _____

II Perception of the Environment

11. We know that our environment is threatened by different factors. Could you tell us what impact you think the following issues have on the environment WORLDWIDE/GLOBAL scale (Being 1 low impact, 2 medium impact and 3 high impact).

Issues	1	2	3
Flooding			
Climate change			
Biological invasions			
Pollution			
Habitat loss and degradation			
Agricultural expansion			
Overexploitation of natural resources			

12. And in our surroundings? Could you tell us what impact you think the following issues have on your LOCAL environment where your school or community is? (Being 1 low impact, 2 medium impact and 3 high impact).

Issues	1	2	3
Flooding			
Climate change			
Biological invasions			
Pollution			
Habitat loss and degradation			
Agricultural expansion			
Overexploitation of natural resources			

13. In ecosystems we find different biotic components (living beings such as animals, plants, fungi, microorganisms). Could you name THREE biotic components from the environment where you live? Try to write their names. Example: Willow instead of tree, Red fire ant instead of insect. Other examples: hornero, thrush, cat, earthworm, linden, rose).

Biotic component 1. _____, Biotic component 2. _____, Biotic component 3. _____

14. Do you consider that the humans are part of the ecosystem where you live? ☐ Yes ☐ No ☐ Maybe

15. Could you explain the reason why you selected the last answer? _____

III: Recognition of Native and Invasive Alien Species

16. Let's play. The following photographs correspond to a group of native and exotic species from the environments of our country (Argentina). Could you indicate which you think are NATIVE SPECIES? (Photographs appear at random in each questionnaire).



Photo by Ana Faltlhauser



Photo by Nicolás Vernazza



Photo by Ana Faltlhauser



Photo by Ana Faltlhauser



Photo by Ana Faltlhauser



Photo by "Moncho" Alvarado



Photo by Adrian Grilli



Photo by Adrian Grilli

17. The following are common and scientific names of native and exotic species found in our country. Which are NATIVE SPECIES? (Written names appear at random in each questionnaire).

- ☐ Cockspur coral tree (*Erythrina crista-galli*) ☐ Chinaberry tree (*Melia azedarach*) ☐ Water primrose (*Ludwigia grandiflora* subsp. *hexapetala*) ☐ Yellow Flag Iris (*Iris pseudacorus*) ☐ Capybara (*Hydrochoerus hydrochaeris*) ☐ Beaver (*Castor canadensis*) ☐ Thrush (*Turdus rufiventris*) ☐ Starling (*Sturnus vulgaris*)

IV. Biological Invasions Awareness

18. Have you ever heard about biological invasions? Do you know what they mean? ☐ Yes ☐ No ☐ Maybe

19. We would like you to tell us a little more about what you know about BIOLOGICAL INVASIONS or if you know any examples _____

Appendix S2. Responses to the questionnaire

Sampling methodology, estimating sample size

The target population, teachers of Argentina, is estimated in around 1400000 according to Ministry of Education of Argentina¹. To estimate minimal sample (S) of our survey we used the following equation, modified from D'Ancona²:

Equation S1.

$$S = \frac{\frac{Z^2 P(1 - P)}{e^2}}{1 + \left(\frac{Z^2 P(1 - P)}{e^2 N} \right)}$$

Where N=population size, e=error, z=score of standard deviation.

For this purpose, N=1,400,000, e=0.05, z=1.96. So, we expected to have at least 385 responses with 95% of confidence level and 5% of margin error.

References

1. Ministerio de Educación de la República Argentina. Base de Datos-Información Estadística. *Base de Datos por Escuela 2019* <https://www.argentina.gob.ar/educacion/evaluacion-informacion-educativa/bdd> (2019).
2. D'Ancona, M. Á. *Metodología cuantitativa: estrategias y técnicas de investigación social*. (Editorial Síntesis SA, 1996).

Table S1. Descriptive statistics of the responses of the questionnaire.

Variables	Min.	1st Quartile	Median	Mean	3rd Quartile	Max
Age	18.00	33.00	40.00	41.21	49.25	73.00
Years of teaching	0.00	5.00	10.00	12.89	20.00	54.00
Educational level	1.00	4.00	4.00	4.10	4.00	6.00
Natural Science Teacher	0.00	0.00	1.000	0.55	1.00	1.00
NGEO member	0.00	0.00	0.00	0.15	0.00	1.00
Protected areas frequency	0.00	2.00	3.00	2.52	3.00	3.00
Flooding W	1.00	2.00	2.00	2.38	3.00	3.00
Climate change W	1.00	3.00	3.00	2.77	3.00	3.00
Biological Invasions W	1.00	2.00	2.00	2.33	3.00	3.00
Pollution W	1.00	3.00	3.00	2.89	3.00	3.00
Habitat destruction W	1.00	3.00	3.00	2.79	3.00	3.00
Agriculture W	1.00	2.00	3.00	2.54	3.00	3.00
Overexploitation NR W	1.00	3.00	3.00	2.86	3.00	3.00
Flooding L	1.00	1.00	2.00	1.95	3.00	3.00
Climate change L	1.00	2.00	2.00	2.25	3.00	3.00
Biological Invasions L	1.00	1.00	2.00	1.87	2.00	3.00
Pollution L	1.00	2.00	3.00	2.55	3.00	3.00
Habitat destruction L	1.00	2.00	2.00	2.21	3.00	3.00
Agriculture L	1.00	1.00	2.00	1.74	2.00	3.00
Overexploitation NR L	1.00	1.00	2.00	2.00	3.00	3.00
Capybara P	0.00	1.00	1.00	0.83	1.00	1.00
Capybara W	0.00	1.00	1.00	0.89	1.00	1.00
Beaver P	0.00	0.00	0.00	0.28	1.00	1.00
Beaver W	0.00	0.00	0.00	0.13	0.00	1.00
Cockspur coral tree P	0.00	1.00	1.00	0.80	1.00	1.00
Cockspur coral tree W	0.00	1.00	1.00	0.93	1.00	1.00
Water primrose P	0.00	0.00	0.00	0.32	1.00	1.00
Water primrose W	0.00	0.00	0.00	0.32	1.00	1.00
Starling P	0.00	0.00	0.00	0.34	1.00	1.00
Starling W	0.00	0.00	0.00	0.15	0.00	1.00
Yellow Flag Iris P	0.00	0.00	0.00	0.33	1.00	1.00
Yellow Flag Iris W	0.00	0.00	0.00	0.31	1.00	1.00
Chinaberry tree P	0.00	0.00	0.00	0.28	1.00	1.00
Chinaberry tree W	0.00	0.00	0.00	0.40	1.00	1.00
Thrush P	0.00	0.00	1.00	0.67	1.00	1.00
Thrush W	0.00	1.00	1.00	0.82	1.00	1.00
Invasion knowledge	0.00	1.00	1.00	0.97	1.00	2.00

W = world (global), L = local, NR = Natural Resources

Figure S1. Histogram of respondents' ages

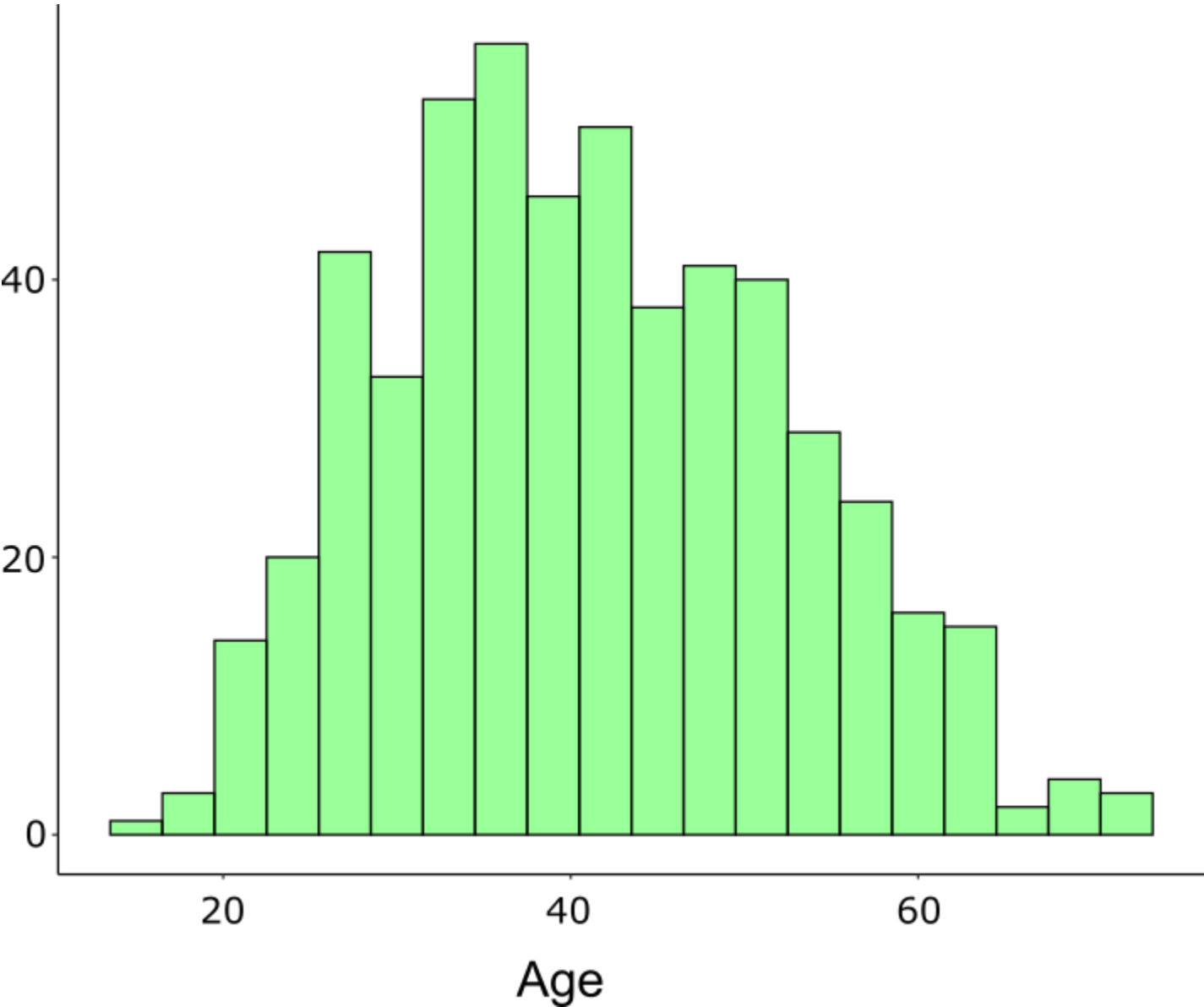


Table S2. Multiple comparisons between groups after the Friedman test. Multiple-paired comparisons and their observed differences and critical differences for a statistical significance.

Comparisons	Observed Difference	Critical Difference	Difference
Flooding_W-Climate_change_W	1171.5	471.5088	*
Flooding_W-Biol_Invasions_W	136.5	471.5088	NS
Flooding_W-Pollution_W	1526.5	471.5088	*
Flooding_W-Habitat_destruction_W	1224	471.5088	*
Flooding_W-Agriculture_W	499	471.5088	*
Flooding_W-Overexploitation_NR_W	1443.5	471.5088	*
Flooding_W-Flooding_L	1014	471.5088	*
Flooding_W-Climate_change_L	318	471.5088	NS
Flooding_W-Biol_Invasions_L	1294.5	471.5088	*
Flooding_W-Pollution_L	541	471.5088	*
Flooding_W-Habitat_destruction_L	369	471.5088	NS
Flooding_W-Agriculture_L	1475	471.5088	*
Flooding_W-Overexploitation_NR_L	881.5	471.5088	*
Climate_change_W-Biol_Invasions_W	1308	471.5088	*
Climate_change_W-Pollution_W	355	471.5088	NS
Climate_change_W-Habitat_destruction_W	52.5	471.5088	NS
Climate_change_W-Agriculture_W	672.5	471.5088	*
Climate_change_W-Overexploitation_NR_W	272	471.5088	NS
Climate_change_W-Flooding_L	2185.5	471.5088	*
Climate_change_W-Climate_change_L	1489.5	471.5088	*
Climate_change_W-Biol_Invasions_L	2466	471.5088	*
Climate_change_W-Pollution_L	630.5	471.5088	*
Climate_change_W-Habitat_destruction_L	1540.5	471.5088	*
Climate_change_W-Agriculture_L	2646.5	471.5088	*
Climate_change_W-Overexploitation_NR_L	2053	471.5088	*
Biol_Invasions_W-Pollution_W	1663	471.5088	*
Biol_Invasions_W-Habitat_destruction_W	1360.5	471.5088	*
Biol_Invasions_W-Agriculture_W	635.5	471.5088	*
Biol_Invasions_W-Overexploitation_NR_W	1580	471.5088	*
Biol_Invasions_W-Flooding_L	877.5	471.5088	*
Biol_Invasions_W-Climate_change_L	181.5	471.5088	NS
Biol_Invasions_W-Biol_Invasions_L	1158	471.5088	*
Biol_Invasions_W-Pollution_L	677.5	471.5088	*
Biol_Invasions_W-Habitat_destruction_L	232.5	471.5088	NS
Biol_Invasions_W-Agriculture_L	1338.5	471.5088	*
Biol_Invasions_W-Overexploitation_NR_L	745	471.5088	*
Pollution_W-Habitat_destruction_W	302.5	471.5088	NS
Pollution_W-Agriculture_W	1027.5	471.5088	*
Pollution_W-Overexploitation_NR_W	83	471.5088	NS
Pollution_W-Flooding_L	2540.5	471.5088	*
Pollution_W-Climate_change_L	1844.5	471.5088	*
Pollution_W-Biol_Invasions_L	2821	471.5088	*
Pollution_W-Pollution_L	985.5	471.5088	*

Pollution_W-Habitat_destruction_L	1895.5	471.5088	*
Pollution_W-Agriculture_L	3001.5	471.5088	*
Pollution_W-Overexploitation_NR_L	2408	471.5088	*
Habitat_destruction_W-Agriculture_W	725	471.5088	*
Habitat_destruction_W-Overexploitation_NR_W	219.5	471.5088	NS
Habitat_destruction_W-Flooding_L	2238	471.5088	*
Habitat_destruction_W-Climate_change_L	1542	471.5088	*
Habitat_destruction_W-Biol_Invasions_L	2518.5	471.5088	*
Habitat_destruction_W-Pollution_L	683	471.5088	*
Habitat_destruction_W-Habitat_destruction_L	1593	471.5088	*
Habitat_destruction_W-Agriculture_L	2699	471.5088	*
Habitat_destruction_W-Overexploitation_NR_L	2105.5	471.5088	*
Agriculture_W-Overexploitation_NR_W	944.5	471.5088	*
Agriculture_W-Flooding_L	1513	471.5088	*
Agriculture_W-Climate_change_L	817	471.5088	*
Agriculture_W-Biol_Invasions_L	1793.5	471.5088	*
Agriculture_W-Pollution_L	42	471.5088	NS
Agriculture_W-Habitat_destruction_L	868	471.5088	*
Agriculture_W-Agriculture_L	1974	471.5088	*
Agriculture_W-Overexploitation_NR_L	1380.5	471.5088	*
Overexploitation_NR_W-Flooding_L	2457.5	471.5088	*
Overexploitation_NR_W-Climate_change_L	1761.5	471.5088	*
Overexploitation_NR_W-Biol_Invasions_L	2738	471.5088	*
Overexploitation_NR_W-Pollution_L	902.5	471.5088	*
Overexploitation_NR_W-Habitat_destruction_L	1812.5	471.5088	*
Overexploitation_NR_W-Agriculture_L	2918.5	471.5088	*
Overexploitation_NR_W-Overexploitation_NR_L	2325	471.5088	*
Flooding_L-Climate_change_L	696	471.5088	*
Flooding_L-Biol_Invasions_L	280.5	471.5088	NS
Flooding_L-Pollution_L	1555	471.5088	*
Flooding_L-Habitat_destruction_L	645	471.5088	*
Flooding_L-Agriculture_L	461	471.5088	NS
Flooding_L-Overexploitation_NR_L	132.5	471.5088	NS
Climate_change_L-Biol_Invasions_L	976.5	471.5088	*
Climate_change_L-Pollution_L	859	471.5088	*
Climate_change_L-Habitat_destruction_L	51	471.5088	NS
Climate_change_L-Agriculture_L	1157	471.5088	*
Climate_change_L-Overexploitation_NR_L	563.5	471.5088	*
Biol_Invasions_L-Pollution_L	1835.5	471.5088	*
Biol_Invasions_L-Habitat_destruction_L	925.5	471.5088	*
Biol_Invasions_L-Agriculture_L	180.5	471.5088	NS
Biol_Invasions_L-Overexploitation_NR_L	413	471.5088	NS
Pollution_L-Habitat_destruction_L	910	471.5088	*
Pollution_L-Agriculture_L	2016	471.5088	*
Pollution_L-Overexploitation_NR_L	1422.5	471.5088	*
Habitat_destruction_L-Agriculture_L	1106	471.5088	*
Habitat_destruction_L-Overexploitation_NR_L	512.5	471.5088	*

W = world (global), L = local, NR = Natural Resources, Biol = Biological

Asterisks (*) in **Difference** column means significant differences ($P < 0.05$).

Friedman's Test. Adjusted for ties Critical Value: 2098.541

P.Value Chisq: 0. F Value: 231.3097. P.Value F: 0 .

Post Hoc Analysis Alpha: 0.05 ; df Error: 6903. t-Student: 1.960308

Table S3. Models selection for questions Q16 and Q17 (Appendix S1). Selected model use to graphed Figure 4 highlighted in red.

Cockspur coral tree (<i>Erythrina crista-galli</i> , <i>ceibo</i> in Spanish)					
PHOTO					
Model	Family	df	logLik	AIC	Delta
~A*NST	binomial(logit)	4	-255.949	519.974	0.000
~A+NST	binomial(logit)	3	-258.340	522.726	2.752
~A	binomial(logit)	2	-260.803	525.629	5.655
~NST	binomial(logit)	2	-261.765	527.553	7.579
~NGEO	binomial(logit)	2	-262.452	528.927	1.374
~1 (null)	binomial(logit)	1	-264.262	530.531	10.557
~EL	binomial(logit)	6	-260.062	532.284	12.310
Cockspur coral tree (<i>Erythrina crista-galli</i> , <i>ceibo</i> in Spanish)					
WRITTEN NAME					
Model	Family	df	logLik	AIC	Delta
~A*NST	binomial(logit)	3	-125.707	257.460	0.000
~A	binomial(logit)	2	-126.846	257.716	0.256
~A*NST	binomial(logit)	4	-125.490	259.055	1.595
~EL	binomial(logit)	2	-127.526	259.076	1.616
~NST	binomial(logit)	2	-127.874	259.770	2.310
~1 (null)	binomial(logit)	1	-129.068	260.143	2.683
~NGEO	binomial(logit)	2	-128.332	260.686	3.226
Chinaberry tree (<i>Melia azedarach</i> , <i>paraíso</i> in Spanish)					
PHOTO					
Model	Family	df	logLik	AIC	Delta
~NST	binomial(logit)	2	-312.001	628.025	0.000
~A*NST	binomial(logit)	3	-311.786	629.617	1.592
~A*NST	binomial(logit)	4	-311.737	631.549	1.932
~1 (null)	binomial(logit)	1	-315.489	632.985	4.961
~NGEO	binomial(logit)	2	-314.983	633.989	5.965
~A	binomial(logit)	2	-315.273	634.569	6.544
~EL	binomial(logit)	6	-311.977	636.114	8.090
Chinaberry tree (<i>Melia azedarach</i> , <i>paraíso</i> in Spanish)					
WRITTEN NAME					
Model	Family	df	logLik	AIC	Delta
~NST	binomial(logit)	2	-353.485	710.993	0.000

~A+NST	binomial(logit)	3	-353.485	713.016	2.023
~NGEO	binomial(logit)	2	-355.326	714.674	3.681
~A*NST	binomial(logit)	4	-353.480	715.036	4.043
~1 (null)	binomial(logit)	1	-358.123	718.254	7.261
~A	binomial(logit)	2	-358.123	720.269	9.276
~EL	binomial(logit)	6	-354.379	720.919	9.926
Water primrose (<i>Ludwigia grandiflora</i> subsp. <i>hexapetala</i>, duraznillo de agua in Spanish) PHOTO					
Model	Family	df	logLik	AIC	Delta
~NGEO	binomial(logit)	2	-332.569	669.160	0.000
~A*NST	binomial(logit)	4	-332.245	672.566	3.405
~1 (null)	binomial(logit)	1	-335.542	673.092	3.931
~A	binomial(logit)	2	-335.514	675.051	5.891
~NST	binomial(logit)	2	-335.522	675.067	5.907
~EL	binomial(logit)	6	-332.295	676.750	7.590
~A+NST	binomial(logit)	3	-335.494	677.034	7.874
Water primrose (<i>Ludwigia grandiflora</i> subsp. <i>hexapetala</i>, duraznillo de agua in Spanish) WRITTEN NAME					
Model	Family	df	logLik	AIC	Delta
~A+NST	binomial(logit)	3	-325.478	657.001	0.000
~NST	binomial(logit)	2	-327.282	658.586	1.585
~A*NST	binomial(logit)	4	-325.470	659.017	2.015
~NGEO	binomial(logit)	2	-331.734	667.491	10.490
~A	binomial(logit)	2	-333.081	670.185	13.184
~1 (null)	binomial(logit)	1	-334.808	671.623	14.622
~EL	binomial(logit)	6	-332.963	678.085	21.084
Yellow Flag Iris (<i>Iris pseudacorus</i>, lirio amarillo in Spanish) PHOTO					
Model	Family	df	logLik	AIC	Delta
~A+NST	binomial(logit)	3	-325.478	657.001	0.000
~NST	binomial(logit)	2	-327.282	658.586	9.038
~A*NST	binomial(logit)	4	-325.470	659.017	9.848
~NGEO	binomial(logit)	2	-331.734	667.491	9.968
~A	binomial(logit)	2	-333.081	670.185	10.027
~1 (null)	binomial(logit)	1	-334.808	671.623	10.766
~EL	binomial(logit)	6	-332.963	678.085	11.870
Yellow Flag Iris (<i>Iris pseudacorus</i>, lirio amarillo in Spanish) WRITTEN NAME					
Model	Family	df	logLik	AIC	Delta
~1 (null)	binomial(logit)	1	-330.221	662.449	0.000
~NST	binomial(logit)	2	-329.770	663.562	1.113
~NGEO	binomial(logit)	2	-329.849	663.721	1.272
~A	binomial(logit)	2	-330.009	664.040	1.592
~EL	binomial(logit)	6	-326.108	664.375	1.927
~A+NST	binomial(logit)	3	-329.558	665.162	2.713
~A*NST	binomial(logit)	4	-328.786	665.648	3.199
Capybara (<i>Hydrochoerus hydrochaeris</i>, carpincho in Spanish)					

PHOTO					
Model	Family	df	logLik	AICc	Delta
~NST	binomial(logit)	2	-243.037	490.097	0.000
~A+NST	binomial(logit)	3	-242.570	491.185	1.088
~A*NST	binomial(logit)	4	-242.273	492.622	2.526
~1 (null)	binomial(logit)	1	-246.547	495.102	5.006
~NGEO	binomial(logit)	2	-245.608	495.238	5.142
~A	binomial(logit)	2	-246.074	496.171	6.074
~EL	binomial(logit)	6	-242.482	497.124	7.027
Capybara (<i>Hydrochoerus hydrochaeris</i> , <i>carpincho</i> in Spanish)					
WRITTEN NAME					
Model	Family	df	logLik	AIC	Delta
~A+NST	binomial(logit)	3	-184.486	375.017	0.000
~A	binomial(logit)	2	-185.505	375.033	0.016
~NGEO	binomial(logit)	2	-185.996	376.014	0.998
~NST	binomial(logit)	2	-186.370	376.763	1.746
~1 (null)	binomial(logit)	1	-187.420	376.847	1.830
~A*NST	binomial(logit)	4	-184.472	377.021	2.004
~EL	binomial(logit)	6	-184.424	381.009	5.992
Beaver (<i>Castor canadensis</i> , <i>castor</i> in Spanish)					
PHOTO					
Model	Family	df	logLik	AIC	Delta
~NST	binomial(logit)	2	-314.851	633.725	0.000
~A+NST	binomial(logit)	3	-314.314	634.673	0.948
~1 (null)	binomial(logit)	1	-316.428	634.864	1.139
~NGEO	binomial(logit)	2	-315.882	635.787	2.061
~A	binomial(logit)	2	-315.890	635.802	2.077
~A*NST	binomial(logit)	4	-314.063	636.202	2.476
~EL	binomial(logit)	6	-314.774	641.707	7.982
Beaver (<i>Castor canadensis</i> , <i>castor</i> in Spanish)					
WRITTEN NAME					
Model	Family	df	logLik	AIC	Delta
~NST	binomial(logit)	2	-204.577	413.177	0.000
~NGEO	binomial(logit)	2	-204.751	413.524	0.347
~A+NST	binomial(logit)	3	-204.564	415.172	1.995
~A*NST	binomial(logit)	4	-203.930	415.936	2.758
~1 (null)	binomial(logit)	1	-207.149	416.305	3.128
~A	binomial(logit)	2	-207.134	418.292	5.114
~EL	binomial(logit)	6	-204.873	421.906	8.729
Thrush (<i>Turdus rufiventris</i> , <i>zorzal</i> in Spanish)					
PHOTO					
Model	Family	df	logLik	AIC	Delta
~NST	binomial(logit)	2	-334.882	673.787	0.000
~A+NST	binomial(logit)	3	-334.558	675.162	1.375
~A*NST	binomial(logit)	4	-334.520	677.116	3.329
~1 (null)	binomial(logit)	1	-339.086	680.179	6.392
~A	binomial(logit)	2	-338.765	681.552	7.765
~NGEO	binomial(logit)	2	-338.766	681.554	7.767

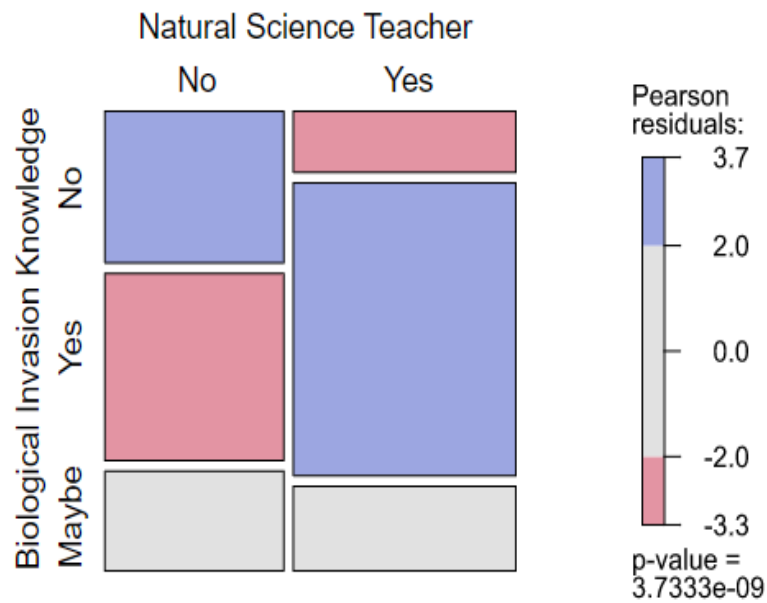
~EL	binomial(logit)	6	-335.214	682.589	8.802
Thrush (<i>Turdus rufiventris</i>, zorzal in Spanish)					
WRITTEN NAME					
Model	Family	df	logLik	AIC	Delta
~NST	binomial(logit)	2	-246.773	497.568	0.000
~1 (null)	binomial(logit)	1	-248.093	498.193	0.625
~A+NST	binomial(logit)	3	-246.106	498.257	0.689
A	binomial(logit)	2	-247.420	498.863	1.295
~A*NST	binomial(logit)	4	-245.989	500.053	2.485
~NGEO	binomial(logit)	2	-248.088	500.198	2.630
~EL	binomial(logit)	6	-244.530	501.219	3.651
Starling (<i>Sturnus vulgaris</i>, estornino in Spanish)					
PHOTO					
Model	Family	df	logLik	AIC	Delta
~A	binomial(logit)	2	-340.483	684.989	0.000
~1 (null)	binomial(logit)	1	-341.769	685.545	0.555
~A+NST	binomial(logit)	3	-340.076	686.198	1.208
~NST	binomial(logit)	2	-341.360	686.742	1.753
~NGEO	binomial(logit)	2	-341.528	687.078	2.088
~EL	binomial(logit)	6	-337.981	688.122	3.133
~A*NST	binomial(logit)	4	-340.074	688.224	3.235
Starling (<i>Sturnus vulgaris</i>, estornino in Spanish)					
WRITTEN NAME					
Model	Family	df	logLik	AIC	Delta
~1 (null)	binomial(logit)	1	-228.662	459.331	0.000
~NST	binomial(logit)	2	-227.760	459.542	0.211
~NGEO	binomial(logit)	2	-228.535	461.093	1.762
~A	binomial(logit)	2	-228.658	461.339	2.008
~A+NST	binomial(logit)	3	-227.756	461.557	2.226
~A*NST	binomial(logit)	4	-227.620	463.315	3.984
~EL	binomial(logit)	6	-227.233	466.626	7.294

A = Age, NST = Natural Science Teacher Condition, EL = Education Level, NGEO = Non-governmental Environment Organization Member, * = interaction

Figure S3. Responses from school community members to the question 18 about their knowledge of biological invasions.

Pearson's Chi-squared test

X-squared = 38.812, df = 2, *P*-value = 3.733e-09



Appendix S3. Preliminary and complementary studies on species recognition

To study the teacher's perception on native and non-native species, we conducted two virtual workshops during the 2020 pandemic. The first one was conducted on October 2nd at *Plaza Ciencia* at San Justo city in Buenos Aires Province, a science fair for teachers and students of all educational levels and the general public. The second one was a workshop organized by the authors at Hurlingham University (<http://www.unahur.edu.ar/es/inscripcion-jornadas-y-talleres-de-integracion-y-articulacion-escuela-universidad>). The attendees were primarily teachers and student teachers from several parts of the country. As part of the second workshop, people were divided into two virtual rooms. Attendees were randomly assigned to one of each room with different topics boarded using a random tool in Zoom. We wanted to know how people considered native and non-native species, so they were asked if the species *CEIBO* (Spanish name of Cockspur coral tree, *Erythrina crista-galli*) was a native or non-native species. One room only saw the written name of the species in Spanish and the scientific name, and the other room only saw a photograph of the plant (an image of the whole tree and detail of flowers).

Perception of attendees was analysed using a Chi-square test for frequency of responses.

As a result, most people recognized the species as a native one, but such selection depended on if they saw the written name or the photograph. More people considered the species as native when it was presented as a written word instead of a photograph.

Table S4. Responses (%) to the native consideration of the *CEIBO*, national flower of Argentina, to attendees of the workshop.

	Photograph (%)	Written name (%)
Native consideration	47 (77.1)	56 (91.8)
Non-native consideration	14 (22.9)	5 (8.2)
Marginal Column Totals	61	61

The chi-square statistic is 5.0496. The *P*-value is 0.024632. Significant at $P < 0.05$.

The chi-square statistic with Yates correction is 3.9898. The *P*-value is 0.045777. Significant at $P < 0.05$.