Supplementary information S1: Questionnaire directed toparticipants. Draft versions of the questionnaire were jointly developed by the authors and pilot tested prior to the survey. We conducted face-to face surveys between 2018 and 2019.

**Questionnaire**

1. Do you know what an invasive alien species is? [yes] [no] [unsure]: If yes, describe what is Invasive alien species
   ……
   ……
   …….
2. Can you name any invasive alien species? [yes] [no]: If yes, list the ones they mention
   ……
   …….....
   .....
3. Do you know what an indigenous species is? [yes] [no] [unsure]: If yes, describe what is an indigenous species
   ……..……
   ……
   ……
4. Can you name any indigenous species? [yes] [no]: If yes list the first 5 they mention
   ……..……
   ……
   ……..
5. Would you like to learn more about Invasive species and their impacts? [yes] [no] [unsure] [not interested]
6. How would you categorise your knowledge of invasive and indigenous flora? [very good] [good] [average] [poor] [very poor] [don't know]

6.1. Can you identify this plant? [yes] [no]: if yes, give name of the plant …… and continue, if no skip rest

6.2. Is it invasive or indigenous? ……....

6.3. Have you personally seen this plant? [yes] [no] [not sure]

6.4. Is it [very common] [common] [moderate] [scarce] [very scarce] in your area?

6.5. Is it spreading and increasing in your area? [yes] [no] [same] [don't know]

6.6. Is this plant [beneficial] [harmful] [no impact] or [both harmful and beneficial]? Reason for answer

……
……

……
……

6.7. Where did you learn about these benefits or impacts? [personal observation] [verbal communication] [school/university] [the media] [the internet] [other – specify]

……
……

……
……

6.1. Can you identify this plant? [yes] [no]: if yes, give name of the plant …… and continue, if no skip rest
6.2. Is it invasive or indigenous? ……....
6.3. Have you personally seen this plant? [yes] [no] [not sure]
6.4. Is it [very common] [common] [moderate] [scarce] [very scarce] in your area?
6.5. Is it spreading and increasing in your area? [yes] [no] [same] [don't know]
6.6. Is this plant [beneficial] [harmful] [no impact] or [both harmful and beneficial]? Reason for answer

……
……

……
……

6.7. Where did you learn about these benefits or impacts? [personal observation] [verbal communication] [school/university] [the media] [the internet] [other – specify]

……
……

……
……

6.1. Can you identify this plant? [yes] [no]: if yes, give name of the plant …… and continue, if no skip rest

6.2. Is it invasive or indigenous?
……

6.3. Have you personally seen this plant? [yes] [no] [not sure]

6.4. Is it [very common] [common] [moderate] [scarce] [very scarce] in your area?

6.5. Is it spreading and increasing in your area? [yes] [no] [same] [don't know]

6.6. Is this plant [beneficial] [harmful] [no impact] or [both harmful and beneficial]? Reason for answer

……
……

……
……

6.7. Where did you learn about these benefits or impacts? [personal observation] [verbal communication] [school/university] [the media] [the internet] [other – specify]

6.1. Can you identify this animal? [yes] [no]: if yes, give name of this animal …… and continue, if no skip rest
6.2. Is it invasive or indigenous?
……
6.3. Have you personally seen this animal? [yes] [no] [not sure]
6.4. Is it [very common] [common] [moderate] [scarce] [very scarce] in your area?
6.5. Is it spreading and increasing in your area? [yes] [no] [same] [don't know]
6.6. Is this animal [beneficial] [harmful] [no impact] or [both harmful and beneficial]? Reason for answer

……..

……..

6.7. Where did you learn about these benefits or impacts? [personal observation] [verbal communication] [school/university] [the media] [the internet] [other – specify]

……..

……
……

6.1. Can you identify this animal? [yes] [no]: if yes, give name of this animal …… and continue, if no skip rest
6.2. Is it invasive or indigenous? ……...
6.3. Have you personally seen this animal? [yes] [no] [not sure]
6.4. Is it [very common] [common] [moderate] [scarce] [very scarce] in your area?
6.5. Is it spreading and increasing in your area? [yes] [no] [same] [don't know]
6.6. Is this animal [beneficial] [harmful] [no impact] or [both harmful and beneficial]? Reason for answer

……
……

……
……

6.7. Where did you learn about these benefits or impacts? [personal observation] [verbal communication] [school/university] [the media] [the internet] [other – specify]

……
……

……
……

6.1. Can you identify this plant? [yes] [no]: if yes, give name of the plant …… and continue, if no skip rest

6.2. Is it invasive or indigenous? ……..

6.3. Have you personally seen this plant? [yes] [no] [not sure]

6.4. Is it [very common] [common] [moderate] [scarce] [very scarce] in your area?

6.5. Is it spreading and increasing in your area? [yes] [no] [same] [don't know]

6.6. Is this plant [beneficial] [harmful] [no impact] or [both harmful and beneficial]? Reason for answer

……
……

……
……

6.7. Where did you learn about these benefits or impacts? [personal observation] [verbal communication] [school/university] [the media] [the internet] [other – specify]

……
……

……
……

6. Have you ever seen any articles with information about invasive alien species? [yes] [no], If yes, where?
.....

7. Would you like to see invasive species removed and densities decreased in your area? [yes] [no] [unsure] [don't care] Reason:
……
……

8. Have you ever removed invasive species? [yes] [no] if yes, which ones and where?
……

……
……..

9. Do you know of any volunteer campaigns that manage/control IAS in your area? [yes] [no] if yes, which ones?
……
……
……..

10. Have you ever volunteered to manage IAS? [yes] [no], If no, would you like to join groups that manage/control IAS in your area? [yes] [no]

11. Have you heard of [iNaturalist/iSpot] [SAPIA] [City of Cape Town EDRR Face book page] [SANBI's Biological Invasion Directorate/Invasive species programme] [ Working for Water] [Cape Nature] [SANParks]?

12. Have you ever reported the localities of invasive species? [yes] [no]: If yes in which platform do you report these localities to? [SAPIA] [iNaturalist] [City of Cape Town Face Book Page] [SANBI's Biological Invasion Directorate] [Working for Water] [SANParks] [Cape Nature] [report them to someone you know that works for these organisations] [you don't report them]. How many times in the past year you reported? [1-5][5-10][10-15][15-25][25-35][35-50] [more than 50 times] Name five species you reported
……
…….....
.....If no, would you be interested in learning how to report the localities of Invasive alien species? [yes] [no]. Reason:
……
……..

13. Would you be happy to receive published information on Invasive alien species? [yes] [no] [only on certain species]. Reason
……
….

**Demographic**

1. Name: …….
2. Gender [M][F]
3. Age …….
4. Ethnic group …….
5. Location …….
6. Residency time in this location: [Born here] [> 20 years] [10-20 years] [ 5-10 years] [1-5 years] [<1 year]
7. Education level…….
8. Current or previous field of work
9. Contact details:
   …….

Supplementary information file S2: A short description of the selected IAS: *Metrosiderous excelsa, Genista monspessulana, Pennisetum setaceum, Harmonia axyridis* and *Sus scrofa*.

Indigenous species: *Aloe arborescens*

| **Species name** | **Native range** | **Growth form** | **Impact** |
|---|---|---|---|
| *Metrosideros excelsa* Sol. ex Gaertn | New Zealand | Tree | It is a problematic invader, displacing fynbos vegetation. |
| *Genista monspessulana* (L.) L.A.S.Johnson | Europe | Shrub | *G. monspessulana* forms dense monospecific stands, increases the fuel load for fires and displaces native species. |
| *Pennisetum setaceum* (Forssk.) Chiov. | North African arid Mediterranean area of the Atlas Mountains | Grass | *Pennisetum setaceum* is a highly aggressive pioneer and fire-adapted species that readily outcompetes native plants |
| *Harmonia axyridis* Pallas | eastern Asia | Invertebrate animal | *Harmonia axyridis* outcompete and displace native ladybird species, |
| *Sus scrofa* Linnaeus | Eurosia | Vertebrate animal | *Sus scrofa* destroy crops and pasture and habitat for indigenous plants and animals. They spread environmental weeds and could spread exotic diseases. |
| *Aloe arborescens* Mill. | South Africa | Shrub - tree | |

Supplementary information S3 – Table S1: showing different linear models tried to assess if knowledge of *Metrosideros excelsa* is correlated with plant densities in different towns. The models are ordered by their relative AIC and the best selected one is highlighted in bold.

| Model number | Model description | Log likelihoods | Number of parameters | delta.aics | Weight (wi) |
|---|---|---|---|---|---|
| **1** | **Metrosideros_ID ~ Residency + Education + Metrosideros_Density** | **-92.7919** | **12** | **0** | **0.323173** |

| | | | | | |
|---|---|---|---|---|---|
| 2 | Metrosideros_ID ~ Education + Metrosideros_Density | -97.121 | 8 | 0.657984 | 0.232571 |
| 3 | Metrosideros_ID ~ Education | -98.2583 | 7 | 0.932913 | 0.202701 |
| 4 | Metrosideros_ID ~ 1 | -108.469 | 1 | 9.3548 | 0.003007 |
| 5 | Metrosideros_ID ~ Residency | -104.513 | 5 | 9.441782 | 0.002879 |
| 6 | Metrosideros_ID ~ Gender | -107.96 | 2 | 10.33703 | 0.00184 |
| 7 | Metrosideros_ID ~ Metrocideros_Density | -108.397 | 2 | 11.21047 | 0.001189 |
| 8 | Metrosideros_ID ~ Age | -106.229 | 7 | 16.87379 | 7.00E-05 |

Table S2: showing different linear models tried to assess if knowledge of *Pennisetum setaceum* is correlated with plant densities in different towns. The models are ordered by their relative AIC and the best selected one is highlighted in bold.

| Model number | Model description | Log likelihoods | Number of parameters | delta.aics | Weight (wi) |
|---|---|---|---|---|---|
| **1** | **Pennisetum_ID ~ Education + Pennisetum_density + Age** | **-100.351** | **14** | **0** | **0.569819** |
| 2 | Pennisetum_ID ~ Residency + Education + Pennisetum_density | -96.8114 | 18 | 0.921027 | 0.359533 |
| 3 | Pennisetum_ID ~ Age | -110.189 | 7 | 5.676259 | 0.033354 |
| 4 | Pennisetum_ID ~ Education + Pennisetum_density | -109.316 | 8 | 5.93041 | 0.029374 |
| 5 | Pennisetum_ID ~ Education | -111.833 | 7 | 8.964689 | 0.006443 |
| 6 | Pennisetum_ID ~ 1 | -120.169 | 1 | 13.63557 | 0.000623 |
| 7 | Pennisetum_ID ~ Gender | -119.754 | 2 | 14.80664 | 0.000347 |
| 8 | Pennisetum_ID ~ Residency | -116.985 | 5 | 15.26824 | 0.000276 |
| 9 | Pennisetum_ID ~ Pennisetum_density | -120.166 | 2 | 15.63004 | 0.00023 |

Supplementary information S4 –: Summary of the parametric variables used in the analyses performed at different scales, their questions/explanation and variable type. The original wording and questions are given in a Supplementary material file 1.

| Predictor Variable | Question/Explanation | Variable Type |
|---|---|---|
| Awareness of the term IAS | *"do you know what an invasive alien species is?: if yes, describe what IAS is"* | Categorical: yes/no<br>no= (person did not provide the correct definition);<br>yes = (person provided the correct definition) |
| Self-estimated knowledge of *Metrosideros excelsa* | Do you know this tree? (shown on a photograph) | Categorical yes/no<br>no= (person did not provide the correct species name);<br>yes = (person provided the correct species name) |
| Self-estimated knowledge of *Pennisetum setaceum* | Do you know this tree? (shown on a photograph) | Categorical: yes/no no= (person did not provide the correct species name); yes = (person provided the correct species name) |
| Alen plant density | How much people know in relation to the number of alien plant species in their towns | Continuous |
| Age | Respondent's age | Continuous: <20 years; 20-29 years;30-39 years;40-49 years;50-59 years;60-69 yeears;60-69 years;70-80 years |
| Gender | Respondents' gender | Categorical: Male/female |
| Education level | Whether respondents were educated or not | Categorical. Categories: Bachelor's degree, Honours degree, National Diploma, Matric, High School, Primary and not disclosed) |

| | | |
|---|---|---|
| Residency | Respondent's resident time in the areas | Categorical. Categories: Just visiting,<1year;1-5 year;5-10 years;10-20 years;>20 years |

Supplementary information S5. Demographic details for the surveyed population from eight towns along the Berg River Catchment.

| Town | Total respondents (n) | Male/Female (n) | Median age | Average residence time lowest/highest (yr) | Lowest/Highest Level of education |
|---|---|---|---|---|---|
| Gouda | 39 | 19/20 | 20 | 1-5/>20 | Grade 5/Grade 12 |
| Hermon | 40 | 11/29 | 37 | 1-5/>20 | Grade 7/Grade 12 |
| Morreesburg | 39 | 12/27 | 39 | 1-5/>20 | Grade 8/ Bachelor's Degree |
| Riebeek Kasteel | 41 | 17/24 | 39 | 1-5/>20 | Grade 12 |
| Riebeek West | 38 | 10/28 | 38 | <1/>20 | Grade 2/Grade 12 |
| Tulbagh | 30 | 19/11 | 35 | <1/>20 | Grade 4/ National Diploma |
| Wolseley | 25 | 19/6 | 31 | 1-5/>20 | Grade 6/ National Diploma |
| Hopefield | 10 | 2/8 | 43 | 1-5/>20 | High school/ National diploma |
| **Total of all respondents** | **262** | | | | |

Supplementary information S6: Significance levels of candidate models with categorical variables explaining correlation between knowledge of IAS (marked with * in Table S1).

What_is_invasive ~ Education

| | Estimate | Std. Error | z | value | Pr(>\|z\|) |
|---|---|---|---|---|---|
| (Intercept) | 1.099 | 1.155 | 0.951 | 0.34139 | |
| Education: High school | -2.691 | 1.197 | -2.248 | 0.0246 | * |
| Education: Honours degree | 13.467 | 882.744 | 0.015 | 0.98783 | |
| Education: Matric | -2.291 | 1.187 | -1.929 | 0.05371 | . |
| Education: National diploma | 1.204 | 1.56 | 0.772 | 0.44022 | |
| Education: Primary | -4.682 | 1.537 | -3.047 | 0.00231 | ** |
| Education: refused | -4.127 | 1.297 | -3.182 | 0.00147 | ** |

What_is_invasive ~ Location

| | Estimate | Std. Error | z | value | Pr(>\|z\|) |
|---|---|---|---|---|---|
| (Intercept) | -2.48491 | 0.60093 | -4.135 | 3.55E-05 | *** |
| Location: Hermon | -1.17865 | 1.1776 | -1.001 | 0.31688 | |
| Location: Hopefield | 2.48491 | 0.87242 | 2.848 | 0.0044 | ** |
| Location: Moorreesburg | 1.67398 | 0.69389 | 2.412 | 0.01585 | * |
| Location: Riebeek-Kasteel | -16.0812 | 1018.665 | -0.016 | 0.9874 | |
| Location: Riebeek-West | 0.02817 | 0.8503 | 0.033 | 0.97357 | |
| Location: Tulbagh | 2.21664 | 0.70488 | 3.145 | 0.00166 | ** |
| Location: Wolseley | 2.07944 | 0.72648 | 2.862 | 0.00421 | ** |

What_is_invasive ~ Age

| | Estimate | Std. Error | z | value | Pr(>\|z\|) |
|---|---|---|---|---|---|
| (Intercept) | -2.2246 | 0.5263 | -4.227 | 2.37E-05 | *** |
| Age: 18-29 | 0.8237 | 0.5918 | 1.392 | 0.164 | |
| Age: 30-39 | 0.9561 | 0.6476 | 1.476 | 0.14 | |
| Age: 40-49 | 0.9253 | 0.6468 | 1.431 | 0.153 | |
| Age: 50-59 | 0.5382 | 0.7169 | 0.751 | 0.453 | |
| Age: 60-69 | 0.3528 | 0.9241 | 0.382 | 0.703 | |
| Age: >80 | 0.8383 | 1.2357 | 0.678 | 0.498 | |

What_is_invasive ~ Residency

| | Estimate | Std. Error | z | value | Pr(>\|z\|) |
|---|---|---|---|---|---|
| (Intercept) | 1.88E-14 | 1.00E+00 | 0 | 1.00E+00 | |
| Residency >20 | -1.64E+00 | 1.03E+00 | -1.591 | 0.1115 | |
| Residency: 1-5 | -4.42E-01 | 1.09E+00 | -0.406 | 0.6845 | |
| Residency: 10-20 | -2.21E+00 | 1.06E+00 | -2.085 | 0.0371 | * |
| Residency: 5-10 | -8.65E-01 | 1.09E+00 | -0.797 | 0.4254 | |

What_is_invasive ~ Gender + Residency + Age + Education + alien_density

| | Estimate | Std. Error | z | value | Pr(>\|z\|) |
|---|---|---|---|---|---|
| (Intercept) | 2.70E+00 | 2.13E+00 | 1.263 | 0.206491 | |
| GenderMale | 1.12E+00 | 4.32E-01 | 2.589 | 0.009613 | ** |
| Residency >20 | -7.82E-01 | 1.33E+00 | -0.589 | 0.556061 | |
| Residency: 1-5 | 1.16E-01 | 1.42E+00 | 0.081 | 0.935316 | |
| Residency: 10-20 | -8.28E-01 | 1.41E+00 | -0.586 | 0.558021 | |
| Residency: 5-10 | 1.37E-02 | 1.41E+00 | 0.01 | 0.992224 | |
| Age: 18-29 | -3.51E-03 | 8.49E-01 | -0.004 | 0.996699 | |
| Age: 30-39 | -1.88E-01 | 9.30E-01 | -0.202 | 0.84007 | |
| Age: 40-49 | 2.96E-01 | 9.68E-01 | 0.306 | 0.759801 | |
| Age: 50-59 | 7.48E-01 | 1.05E+00 | 0.712 | 0.47664 | |
| Age: 60-69 | 7.24E-01 | 1.20E+00 | 0.606 | 0.544742 | |
| Age: >80 | -1.53E+00 | 2.19E+00 | -0.7 | 0.483695 | |
| Education: High school | -2.59E+00 | 1.44E+00 | -1.797 | 0.072261 | . |
| Education: Honours degree | 1.33E+01 | 1.46E+03 | 0.009 | 0.992698 | |
| Education: Matric | -2.45E+00 | 1.45E+00 | -1.687 | 0.091524 | . |
| Education: National diploma | 1.01E+00 | 1.81E+00 | 0.557 | 0.577474 | |
| Education: Primary | -4.83E+00 | 1.80E+00 | -2.683 | 0.007294 | ** |
| Education: refused | -3.82E+00 | 1.55E+00 | -2.458 | 0.013974 | * |
| alien_density | -9.31E-01 | 2.80E-01 | -3.328 | 0.000876 | *** |

What_is_invasive ~ Gender + Education

| | Estimate | Std. Error | z | value | Pr(>\|z\|) |
|---|---|---|---|---|---|
| (Intercept) | 0.5837 | 1.2002 | 0.486 | 0.62674 | |
| GenderMale | 1.2157 | 0.3945 | 3.082 | 0.00206 | ** |
| Education: High school | -2.792 | 1.2401 | -2.251 | 0.02436 | * |
| Education: Honours degree | 12.7666 | 882.7442 | 0.014 | 0.98846 | |
| EducationMatric | -2.2978 | 1.2279 | -1.871 | 0.0613 | . |
| Education: National diploma | 1.2044 | 1.598 | 0.754 | 0.45101 | |
| EducationPrimary | -4.7979 | 1.5732 | -3.05 | 0.00229 | ** |
| Educationrefused | -4.3546 | 1.3416 | -3.246 | 0.00117 | ** |

**What_is_invasive ~ Gender + Education + alien_density**

| | Estimate | Std. Error | z | value | Pr(>\|z\|) |
|---|---|---|---|---|---|
| (Intercept) | 2.26E+00 | 1.44E+00 | 1.567 | 1.17E-01 | |
| Gender: Male | 1.1905 | 4.08E-01 | 2.92E+00 | 0.00355 | ** |
| Education: High school | -2.93E+00 | 1.39E+00 | -2.118 | 0.0342 | * |
| Education: Honours degree | 1.25E+01 | 8.83E+02 | 0.014 | 0.98872 | |
| Education: Matric | -2.6466 | 1.38E+00 | -1.92E+00 | 0.05545 | . |
| Education: National diploma | 0.7788 | 1.7094 | 0.456 | 0.64869 | |
| Education: Primary | -5.3206 | 1.7101 | -3.111 | 0.00186 | ** |
| Education: refused | -4.1995 | 1.4892 | -2.82 | 0.0048 | ** |
| alien_density | -0.8051 | 0.2509 | -3.208 | 0.00134 | ** |