

# WSP closed question analysis

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## WSP - Analysis, stats and visualisations for closed questions

This rMarkdown explores and analyses the closed-ended questions

### About rMarkdowns

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com> (<http://rmarkdown.rstudio.com>). To generate the document of all content, click the **Knit** button.

This rMarkdown document will be periodically updated and uploaded to the OneDrive folder and pushed to the WSP GitHub code repository. The primary format of this document is HTML, but this can be easily changed by changing the output (e.g. PDF, GitHub) using the 'output' section at the top of the document. The possible output formats are listed here: <https://rmarkdown.rstudio.com/lesson-9.html> (<https://rmarkdown.rstudio.com/lesson-9.html>).

## Sectioned analysis (in order found in questionnaire)

### Respondent knowledge

Respondent knowledge questions have yes/no/notsure or incorrect/correct answer formats, lending themselves to Likert or Stacked bar plot style plots. Below I have created some initial plots, seperated according to sample type and started calculating sample sizes per question to create a table to display the sample sizes per column, per survey type.

Some useful Likert plotting guides and packages: \* [https://cran.r-project.org/web/packages/sjPlot/vignettes/plot\\_likert\\_scales.html](https://cran.r-project.org/web/packages/sjPlot/vignettes/plot_likert_scales.html) ([https://cran.r-project.org/web/packages/sjPlot/vignettes/plot\\_likert\\_scales.html](https://cran.r-project.org/web/packages/sjPlot/vignettes/plot_likert_scales.html)) \* <https://towardsdatascience.com/how-to-plot-likert-scales-with-a-weighted-survey-in-a-dplyr-friendly-way-68df600881a> (<https://towardsdatascience.com/how-to-plot-likert-scales-with-a-weighted-survey-in-a-dplyr-friendly-way-68df600881a>) \* <https://www.r-graph-gallery.com/202-barplot-for-likert-type-items.html> (<https://www.r-graph-gallery.com/202-barplot-for-likert-type-items.html>)

### Q2) Which of the following animals is a white stork?

```
### Calculating sample sizes for knowledge questions table

# Selecting image of WS
final_data %>%
  dplyr::select(SurveyType, Q2_photo_recog_score, Q2_photo_recog) %>%
  dplyr::group_by(SurveyType, Q2_photo_recog) %>%
  summarise(n = n()) %>%
  mutate(Percent = (n / sum(n)*100))
```

```
## # A tibble: 12 x 4
## # Groups:   SurveyType [2]
##   SurveyType Q2_photo_recog     n Percent
##   <fct>      <fct>          <int>   <dbl>
## 1 NatRep     A              19    1.66
## 2 NatRep     B             407   35.6
## 3 NatRep     C              12    1.05
## 4 NatRep     D             567  49.6
## 5 NatRep     Don't know    133  11.6
## 6 NatRep     E               5   0.437
## 7 Proactive  A              16   0.670
## 8 Proactive  B            2124  88.9
## 9 Proactive  C               6   0.251
## 10 Proactive D             171   7.16
## 11 Proactive Don't know     69   2.89
## 12 Proactive E               2   0.0838
```

## Q3) Is the white stork native to England?

```
## # A tibble: 6 x 4
## # Groups:   SurveyType [2]
##   SurveyType Q3_is_native     n Percent
##   <fct>      <fct>          <int>   <dbl>
## 1 NatRep     No              219    19.2
## 2 NatRep     Not sure       711    62.2
## 3 NatRep     Yes            213    18.6
## 4 Proactive  No              344    14.4
## 5 Proactive  Not sure       682    28.6
## 6 Proactive  Yes           1362    57.0
```

## Q4) Are the following statements true or false?

1. Most European white storks migrate south to Africa in the winter
2. A white stork's wingspan can exceed 2 meters (6 feet 7 inches)
3. White storks are globally rare

```
## Warning: `funs()` was deprecated in dplyr 0.8.0.
## Please use a list of either functions or lambdas:
##
##   # Simple named list:
##   list(mean = mean, median = median)
##
##   # Auto named with `tibble::lst()`:
##   tibble::lst(mean, median)
##
##   # Using lambdas
##   list(~ mean(., trim = .2), ~ median(., na.rm = TRUE))
```

```
## # A tibble: 6 x 4
## # Groups:   SurveyType [2]
##   SurveyType Q4.1_migrate      n Percent
##   <fct>      <fct>      <int>   <dbl>
## 1 NatRep     Don't know      642    56.2
## 2 NatRep     FALSE           38     3.32
## 3 NatRep     TRUE            463    40.5
## 4 Proactive  Don't know      861    36.1
## 5 Proactive  FALSE            93     3.89
## 6 Proactive  TRUE           1434    60.1
```

```
## # A tibble: 6 x 4
## # Groups:   SurveyType [2]
##   SurveyType Q4.2_wingspan      n Percent
##   <fct>      <fct>      <int>   <dbl>
## 1 NatRep     Don't know      543    47.5
## 2 NatRep     FALSE           73     6.39
## 3 NatRep     TRUE            527    46.1
## 4 Proactive  Don't know      618    25.9
## 5 Proactive  FALSE            82     3.43
## 6 Proactive  TRUE           1688    70.7
```

```
## # A tibble: 6 x 4
## # Groups:   SurveyType [2]
##   SurveyType Q4.3_globallyrare      n Percent
##   <fct>      <fct>      <int>   <dbl>
## 1 NatRep     Don't know      594    52.0
## 2 NatRep     FALSE           99     8.66
## 3 NatRep     TRUE            450    39.4
## 4 Proactive  Don't know     1036    43.4
## 5 Proactive  FALSE           697    29.2
## 6 Proactive  TRUE            655    27.4
```

## Q5) What do white storks typically eat?

[multi-select] Amphibians; Fish; Invertebrates; Reptiles; Small mammals; Bird eggs/chicks; Carrion; Food waste; Vegetation; Seeds; Fruit; Don't know

```
## # A tibble: 24 x 5
## # Groups:   SurveyType, Diet [24]
##   SurveyType Diet      Answer  count percent
##   <fct>      <chr>      <chr>   <int>   <dbl>
## 1 NatRep     Q5a_amphibians_diet Correct    228    19.9
## 2 NatRep     Q5b_birdeggs.chicks_diet Correct    142    12.4
## 3 NatRep     Q5c_carrion_diet      Correct     63     5.51
## 4 NatRep     Q5d_fish_diet         Correct    651    57.0
## 5 NatRep     Q5e_foodwaste_diet    Correct     67     5.86
## 6 NatRep     Q5f_fruit_diet        Correct     51     4.46
## 7 NatRep     Q5g_inverts_diet      Correct    256    22.4
## 8 NatRep     Q5h_reptiles_diet     Correct    137    12.0
## 9 NatRep     Q5i_seeds_diet        Correct     78     6.82
## 10 NatRep    Q5j_smallmammals_diet Correct    141    12.3
## # ... with 14 more rows
```

## Q6) What are white storks preferred feeding habitat?

[multi-select] Shallow wetlands; Grassland; Farmland; Woodland; Urban; Don't know

```
## # A tibble: 12 x 5
## # Groups:   SurveyType, Habitat [12]
##   SurveyType Habitat      Answer count percent
##   <fct>      <chr>      <chr>   <int>   <dbl>
## 1 NatRep     Q6a_farmland_habitat Yes      109     9.54
## 2 NatRep     Q6b_grassland_habitat Yes      198    17.3
## 3 NatRep     Q6c_wetlands_habitat Yes      661    57.8
## 4 NatRep     Q6d_woodland_habitat Yes       74     6.47
## 5 NatRep     Q6e_urban_habitat   Yes       23     2.01
## 6 NatRep     Q6f_Don.tKnow_habitat Yes      342    29.9
## 7 Proactive  Q6a_farmland_habitat Yes      712    29.8
## 8 Proactive  Q6b_grassland_habitat Yes     1159    48.5
## 9 Proactive  Q6c_wetlands_habitat Yes     1663    69.6
## 10 Proactive Q6d_woodland_habitat Yes      206     8.63
## 11 Proactive Q6e_urban_habitat   Yes       84     3.52
## 12 Proactive Q6f_Don.tKnow_habitat Yes      363    15.2
```

## Q7) Where do white storks typically nest?

[multi-select] Trees; Roofs of buildings; Chimneys; Telegraph poles; Ground; Don’t know

```
## # A tibble: 12 x 5
## # Groups:   SurveyType, Nest [12]
##   SurveyType Nest      Answer count percent
##   <fct>      <chr>      <chr>   <int>   <dbl>
## 1 NatRep     Q7a_chimneys_nesting Yes      173    15.1
## 2 NatRep     Q7b_ground_nesting  Yes      244    21.3
## 3 NatRep     Q7c_roofs_nesting   Yes      208    18.2
## 4 NatRep     Q7d_telegraphpoles_nesting Yes      106     9.27
## 5 NatRep     Q7e_trees_nesting   Yes      296    25.9
## 6 NatRep     Q7f_Don.tKnow_nesting Yes      449    39.3
## 7 Proactive  Q7a_chimneys_nesting Yes     1251    52.4
## 8 Proactive  Q7b_ground_nesting  Yes      106     4.44
## 9 Proactive  Q7c_roofs_nesting   Yes     1252    52.4
## 10 Proactive Q7d_telegraphpoles_nesting Yes      978    41.0
## 11 Proactive Q7e_trees_nesting   Yes     1784    74.7
## 12 Proactive Q7f_Don.tKnow_nesting Yes       200     8.38
```

## If/where seen a white stork

## Q8) Before taking this survey, had you ever seen a white stork?

[multi-select] Yes, in the wild; Yes, in captivity; Yes, in pictures/videos; No; Not sure

```
##   Q8_wild_seen Q8_captivity_seen Q8_pictures_video Q8_No Q8_NotSure SurveyType
## 1           0           0           1      0           0 Proactive
## 2           1           0           0      0           0 Proactive
## 3           1           0           0      0           0 Proactive
## 4           1           1           0      0           0 Proactive
## 5           1           1           0      0           0 Proactive
## 6           0           0           1      0           0 Proactive
##   UniqueID_all
## 1            1
## 2            2
## 3            3
## 4            4
## 5            5
## 6            6
```

```
## # A tibble: 11 x 5
## # Groups:   SurveyType, Q8_option [11]
##   SurveyType Q8_option      Answer      n Percent
##   <fct>      <chr>          <int> <int>   <dbl>
## 1 NatRep     Q8_captivity_seen      1     83   7.26
## 2 NatRep     Q8_No                  1    523  45.8
## 3 NatRep     Q8_NotSure             1    163  14.3
## 4 NatRep     Q8_pictures_video      1    285  24.9
## 5 NatRep     Q8_wild_seen           1    156  13.6
## 6 Proactive  Q8_captivity_seen      1    367  15.4
## 7 Proactive  Q8_No                  1    339  14.2
## 8 Proactive  Q8_NotSure             1    119   4.98
## 9 Proactive  Q8_pictures_video      1    827  34.6
## 10 Proactive Q8_wild_seen           1   1286  53.9
## 11 Proactive UniqueID_all          1      1  0.0419
```

```
## # A tibble: 8 x 4
## # Groups:   SurveyType [2]
##   SurveyType Q8.WhereSeen      n Percent
##   <fct>      <fct>          <int>   <dbl>
## 1 NatRep     Both              10   0.875
## 2 NatRep     OutsideUK         92   8.05
## 3 NatRep     UK                54   4.72
## 4 NatRep     <NA>             987  86.4
## 5 Proactive  Both             289  12.1
## 6 Proactive  OutsideUK        579  24.2
## 7 Proactive  UK               418  17.5
## 8 Proactive  <NA>            1102  46.1
```

## Q9) Before taking this survey, had you ever heard of the White Stork Project and its efforts to reintroduce white storks to southern England?

[options] Yes, No, Not sure

```
## # A tibble: 6 x 4
## # Groups:   SurveyType [2]
##   SurveyType Q9_heard      n Percent
##   <fct>      <fct>          <int>   <dbl>
## 1 NatRep     No              988   86.4
## 2 NatRep     Not sure        71    6.21
## 3 NatRep     Yes              84    7.35
## 4 Proactive  No              673   28.2
## 5 Proactive  Not sure        69    2.89
## 6 Proactive  Yes            1646   68.9
```

## Q10) How much do you feel you know about the white stork reintroduction currently taking place in southern England?

Nothing; I have heard something but don't know much; I know something about it; I know a lot about it; I am involved in the effort

```
## # A tibble: 10 x 4
## # Groups:   SurveyType [2]
##   SurveyType Q10_project_knowledge      n Percent
##   <fct>      <fct>                <int>   <dbl>
## 1 NatRep     I am involved in the effort         7    0.612
## 2 NatRep     I have heard something but don't know much 181   15.8
## 3 NatRep     I know a lot about it                10    0.875
## 4 NatRep     I know something about it            64    5.60
## 5 NatRep     Nothing                           881   77.1
## 6 Proactive  I am involved in the effort         15    0.628
## 7 Proactive  I have heard something but don't know much 729   30.5
## 8 Proactive  I know a lot about it                172    7.20
## 9 Proactive  I know something about it           906   37.9
## 10 Proactive Nothing                           566   23.7
```

## Q10a) [if selected any option apart from “Nothing”] Where have you heard about the white stork reintroduction project?

[multi-select] White Stork Project website; Social media; TV/Radio; Newspaper; Email; Magazine; Leaflet; Talk by a project spokesperson; Visiting Knepp Estate; Word of mouth; Other

```
## # A tibble: 23 x 5
## # Groups:   SurveyType, Q10_cursource [23]
##   SurveyType Q10_cursource      Answer      n Percent
##   <fct>      <chr>          <chr>   <int>   <dbl>
## 1 NatRep     Q10a_Email      1        18    6.87
## 2 NatRep     Q10a_Leaflet    1        12    4.58
## 3 NatRep     Q10a_Magazine   1        32   12.2
## 4 NatRep     Q10a_Newspaper  1        45   17.2
## 5 NatRep     Q10a_Other      1        12    4.58
## 6 NatRep     Q10a_Socialmedia 1        66   25.2
## 7 NatRep     Q10a_spokesperson 1         7    2.67
## 8 NatRep     Q10a_TV.Radio   1        82   31.3
## 9 NatRep     Q10a_VisitingKnepp 1         5    1.91
## 10 NatRep    Q10a_Wordofmouth 1        36   13.7
## # ... with 13 more rows
```

## Q10b) How would you like information about the ongoing reintroduction to be communicated to you?

[multi-select] White Stork Project website; Social media; TV/Radio; Newspaper; Email; Magazine; Leaflet; Talk by a project spokesperson; Not interested; Other

```
## # A tibble: 20 x 5
## # Groups:   SurveyType, Q10_prefsources [20]
##   SurveyType Q10_prefsources Answer      n Percent
##   <fct>      <chr>          <chr> <int>   <dbl>
## 1 NatRep     Q10b_Email          1     317  27.7
## 2 NatRep     Q10b_Leaflet         1     132  11.5
## 3 NatRep     Q10b_Magazine        1     113   9.89
## 4 NatRep     Q10b_Newspaper       1     198  17.3
## 5 NatRep     Q10b_NotInterested   1     197  17.2
## 6 NatRep     Q10b_Other           1        1  0.0875
## 7 NatRep     Q10b_Socialmedia     1     319  27.9
## 8 NatRep     Q10b_spokesperson    1        59   5.16
## 9 NatRep     Q10b_TV.Radio        1     363  31.8
## 10 NatRep    Q10b_WSPwebsite      1     421  36.8
## 11 Proactive Q10b_Email          1     808  33.8
## 12 Proactive Q10b_Leaflet         1     171   7.16
## 13 Proactive Q10b_Magazine        1     325  13.6
## 14 Proactive Q10b_Newspaper       1     508  21.3
## 15 Proactive Q10b_NotInterested   1     111   4.65
## 16 Proactive Q10b_Other           1        36   1.51
## 17 Proactive Q10b_Socialmedia     1    1542  64.6
## 18 Proactive Q10b_spokesperson    1     458  19.2
## 19 Proactive Q10b_TV.Radio        1     903  37.8
## 20 Proactive Q10b_WSPwebsite      1    1365  57.2
```

## Q12-14) How much do you agree or disagree with the following statements?

- White storks symbolise the beauty of nature.
- White storks play an important role in their environment.
- Reintroduced white storks may have a negative impact on my life.
- I do not want white storks living near me.
- White storks in England could benefit the tourism industry where they're found.
- I would find it exciting to see white storks in the wild in England.
- White storks symbolise hope, rebirth and new life.
- Money spent reintroducing white storks would be better spent elsewhere.
- White storks might be detrimental to local wildlife.
- There is no need to reintroduce the white stork to England as it is common throughout mainland Europe
- I think white storks are useless birds.
- White storks are part of our cultural and natural heritage
- The reintroduced white stork can help people (re)connect with the natural world.
- The countryside will be worse off with white storks around.
- Overall, I support efforts that aim to reintroduce the UK's lost species and restore its natural systems.



```
## # A tibble: 3,651 x 5
## # Groups:   SurveyType, Attitude_questions [22]
##   SurveyType Attitude_questions Answer n Percent
##   <fct>      <chr>              <chr> <int> <dbl>
## 1 NatRep    Q13.1..I.would.find.it.exciting.to.see.w... Agree 420 36.7
## 2 NatRep    Q13.1..I.would.find.it.exciting.to.see.w... Disagree 25 2.19
## 3 NatRep    Q13.1..I.would.find.it.exciting.to.see.w... Don't know 36 3.15
## 4 NatRep    Q13.1..I.would.find.it.exciting.to.see.w... Neutral 196 17.1
## 5 NatRep    Q13.1..I.would.find.it.exciting.to.see.w... Strongly ... 437 38.2
## 6 NatRep    Q13.1..I.would.find.it.exciting.to.see.w... Strongly ... 29 2.54
## 7 NatRep    Q13.2..White.storks.symbolise.hope..rebi... Agree 380 33.2
## 8 NatRep    Q13.2..White.storks.symbolise.hope..rebi... Disagree 45 3.94
## 9 NatRep    Q13.2..White.storks.symbolise.hope..rebi... Don't know 72 6.30
## 10 NatRep   Q13.2..White.storks.symbolise.hope..rebi... Neutral 332 29.0
## # ... with 3,641 more rows
```

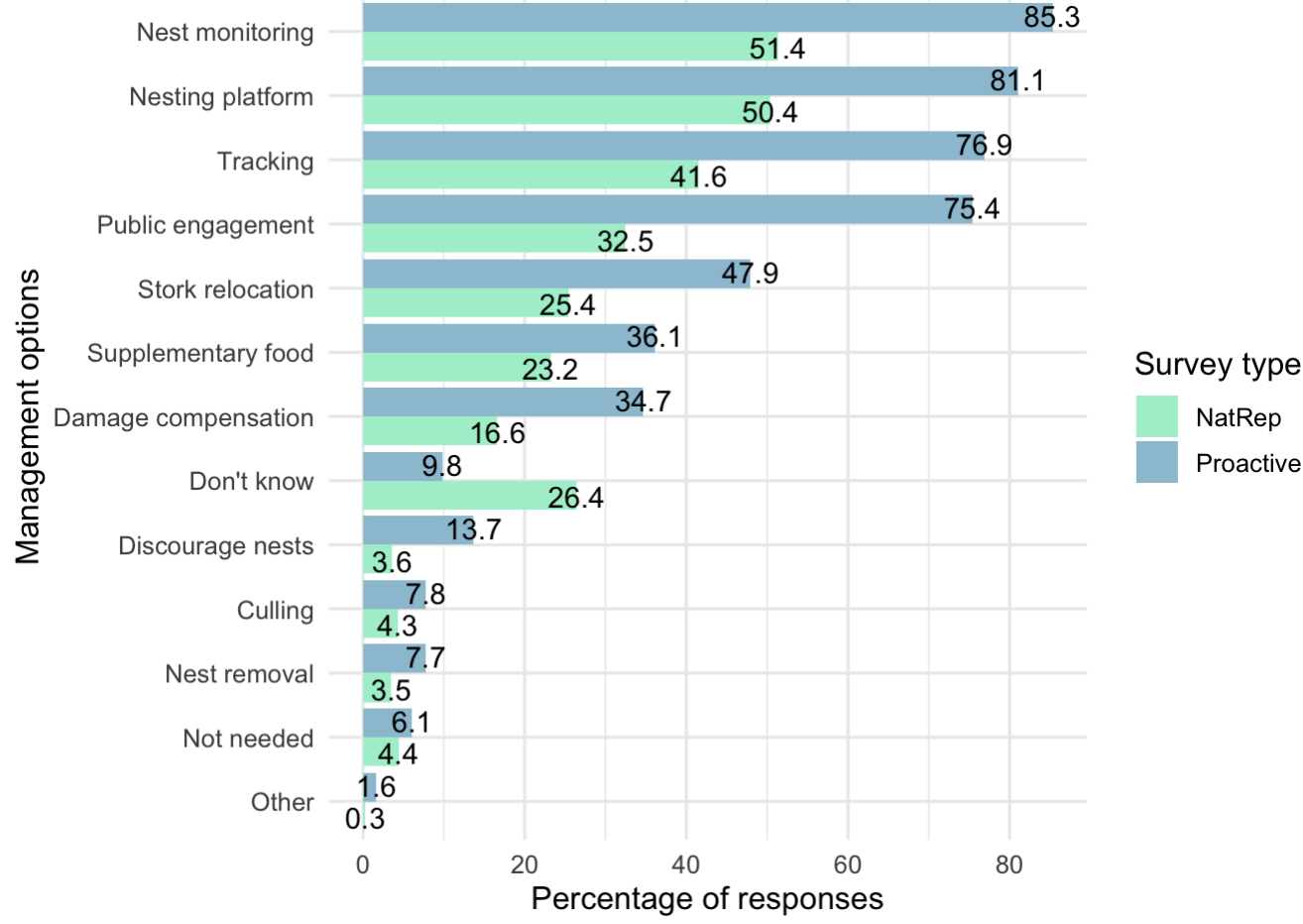
## Q17) Which (if any) methods of white stork project management would you support?

[multi-select] Monitoring nests; Providing places for storks to nest; Discouraging nest building; Nest removal; Tracking movements of individual storks;Public engagement and outreach; Providing supplementary food; Compensation for damage caused by stork activity; Population management by moving storks to other locations; Population management by culling; No management will be necessary; Don't know; Other



```
##      Q17.1_Nest_monitoring Q17.2_Nesting_platforms Q17.3_Discouragenestbuilding
## 1              1              1              0
## 2              0              0              0
## 3              1              1              0
## 4              1              1              0
## 5              1              1              1
## 6              0              0              0
##      Q17.4_Nest_removal Q17.5_Tracking Q17.6_Public_engagement
## 1              0              1              1
## 2              0              0              0
## 3              0              1              1
## 4              0              1              1
## 5              0              1              1
## 6              0              0              0
##      Q17.7_Supplementary_food Q17.8_compensation_storkdamage
## 1              0              0
## 2              0              0
## 3              0              0
## 4              0              1
## 5              0              1
## 6              0              0
##      Q17.9_Stork_relocation Q17.10_Culling Q17_11.management.not.needed
## 1              1              0              0
## 2              0              0              0
## 3              1              0              0
## 4              1              0              0
## 5              0              0              0
## 6              0              0              0
##      Q17.12_Don.tknow Q17.13_other
## 1              0              0
## 2              1              0
## 3              0              0
## 4              0              0
## 5              0              0
## 6              1              0
```

```
## # A tibble: 26 x 5
## # Groups:   SurveyType, Management_options [26]
##   SurveyType Management_options Answer      n Percent
##   <fct>      <chr>          <int> <int>   <dbl>
## 1 NatRep    Q17_11.management.not.needed      1     50    4.37
## 2 NatRep    Q17.1_Nest_monitoring              1    587   51.4
## 3 NatRep    Q17.10_Culling                     1     49    4.29
## 4 NatRep    Q17.12_Don.tknow                   1    302   26.4
## 5 NatRep    Q17.13_other                       1      3    0.262
## 6 NatRep    Q17.2_Nesting_platforms            1    576   50.4
## 7 NatRep    Q17.3_Discouragenestbuilding        1     41    3.59
## 8 NatRep    Q17.4_Nest_removal                  1     40    3.50
## 9 NatRep    Q17.5_Tracking                     1    475   41.6
## 10 NatRep   Q17.6_Public_engagement            1    371   32.5
## # ... with 16 more rows
```



**Q18) In an average week, how many days do you spend more than 1 hour outside in green and natural spaces?**

[options] None; 1-2 days; 3-4 days; 5-6 days; Every day - 7 days

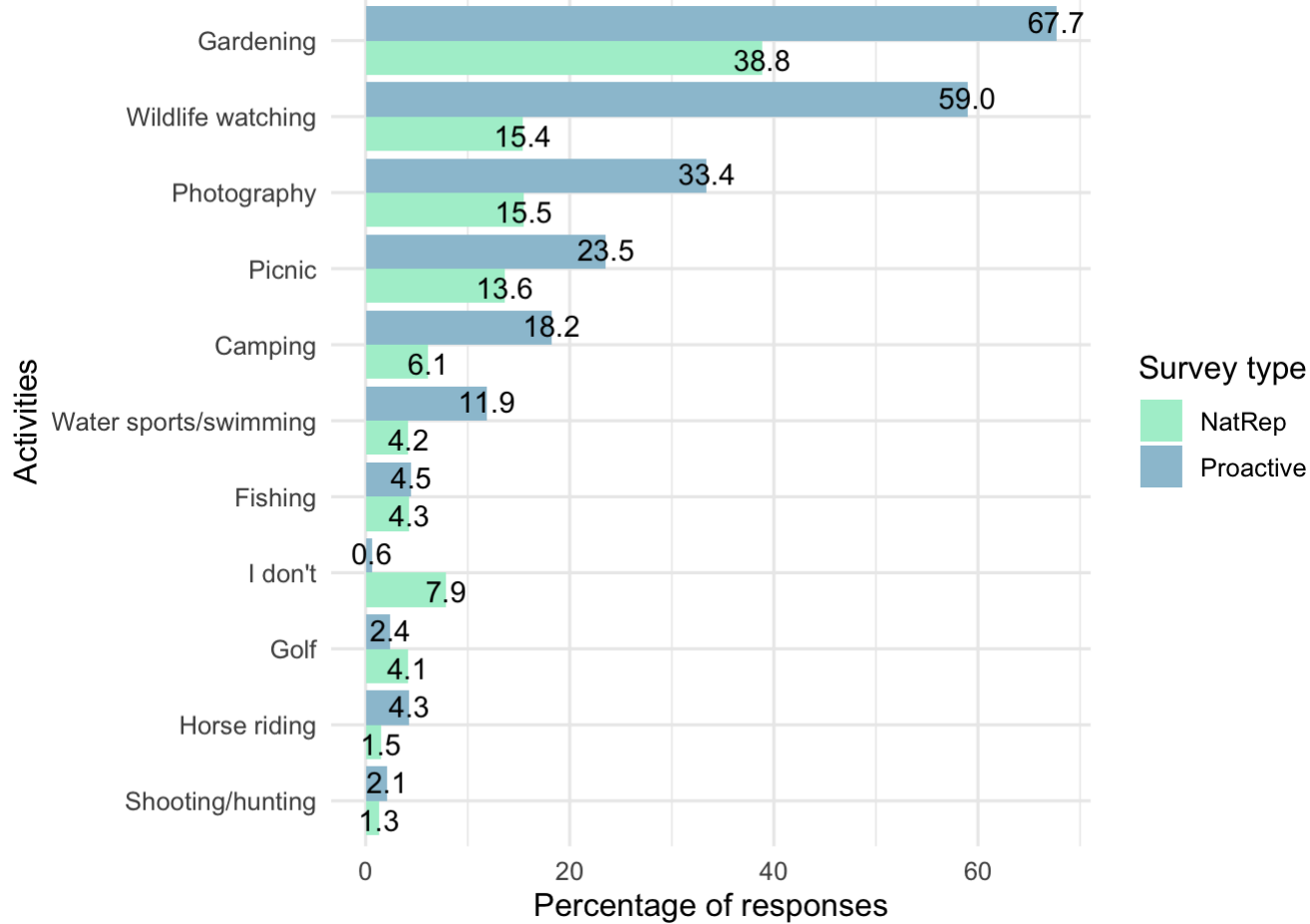
```
## # A tibble: 10 x 5
## # Groups:   SurveyType, Frequency [2]
##   SurveyType Frequency Answer n Percent
##   <fct>      <chr>      <chr> <int> <dbl>
## 1 NatRep     Frequency of nature experience 1-2 days 459 40.2
## 2 NatRep     Frequency of nature experience 3-4 days 236 20.6
## 3 NatRep     Frequency of nature experience 5-6 days 133 11.6
## 4 NatRep     Frequency of nature experience Every day, 7 days 125 10.9
## 5 NatRep     Frequency of nature experience None 190 16.6
## 6 Proactive  Frequency of nature experience 1-2 days 523 21.9
## 7 Proactive  Frequency of nature experience 3-4 days 612 25.6
## 8 Proactive  Frequency of nature experience 5-6 days 495 20.7
## 9 Proactive  Frequency of nature experience Every day, 7 days 721 30.2
## 10 Proactive Frequency of nature experience None 37 1.55
```

**Q18a) Which of these recreation activities do you do while you are outside in green and natural spaces?**

[multi-select] Walking (with dog); Walking (without dog); Running/cycling; Golf; Picnic; Horse riding; Bird/wildlife watching; Photography; Camping; Fishing; Shooting/hunting; Water sports/swimming; Gardening; I don't spend my free time in green and natural spaces; Other

```
##      Q18a.golf Q18a.picnic Q18a.horse.riding Q18a.bird.wildlife.watching
## 1           0           0           0           0
## 2           0           1           0           1
## 3           0           0           0           1
## 4           0           0           0           1
## 5           0           0           0           1
## 6           0           1           0           0
##      Q18a.photography Q18a.camping Q18a.fishing Q18a.shooting.hunting
## 1           0           0           0           0
## 2           0           0           0           0
## 3           0           0           0           0
## 4           0           0           0           0
## 5           1           0           0           0
## 6           0           0           0           0
##      Q18a.water.sports.swimming Q18a.gardening
## 1           0           0
## 2           0           1
## 3           0           0
## 4           0           1
## 5           0           1
## 6           0           1
##      Q18a.don.t.spend.free.time.in.green.natural.spaces
## 1           0
## 2           0
## 3           0
## 4           0
## 5           0
## 6           0
```

```
## # A tibble: 22 x 5
## # Groups:   SurveyType, Activities [22]
##   SurveyType Activities      Answer      n Percent
##   <fct>      <chr>      <int> <int> <dbl>
## 1 NatRep    Wildlife watching      1    176    15.4
## 2 NatRep    Camping              1     70     6.12
## 3 NatRep    I don't              1     90     7.87
## 4 NatRep    Fishing              1     49     4.29
## 5 NatRep    Gardening            1    444    38.8
## 6 NatRep    Golf                 1     47     4.11
## 7 NatRep    Horse riding         1     17     1.49
## 8 NatRep    Photography          1    177    15.5
## 9 NatRep    Picnic               1    156    13.6
## 10 NatRep   Shooting/hunting     1     15     1.31
## # ... with 12 more rows
```

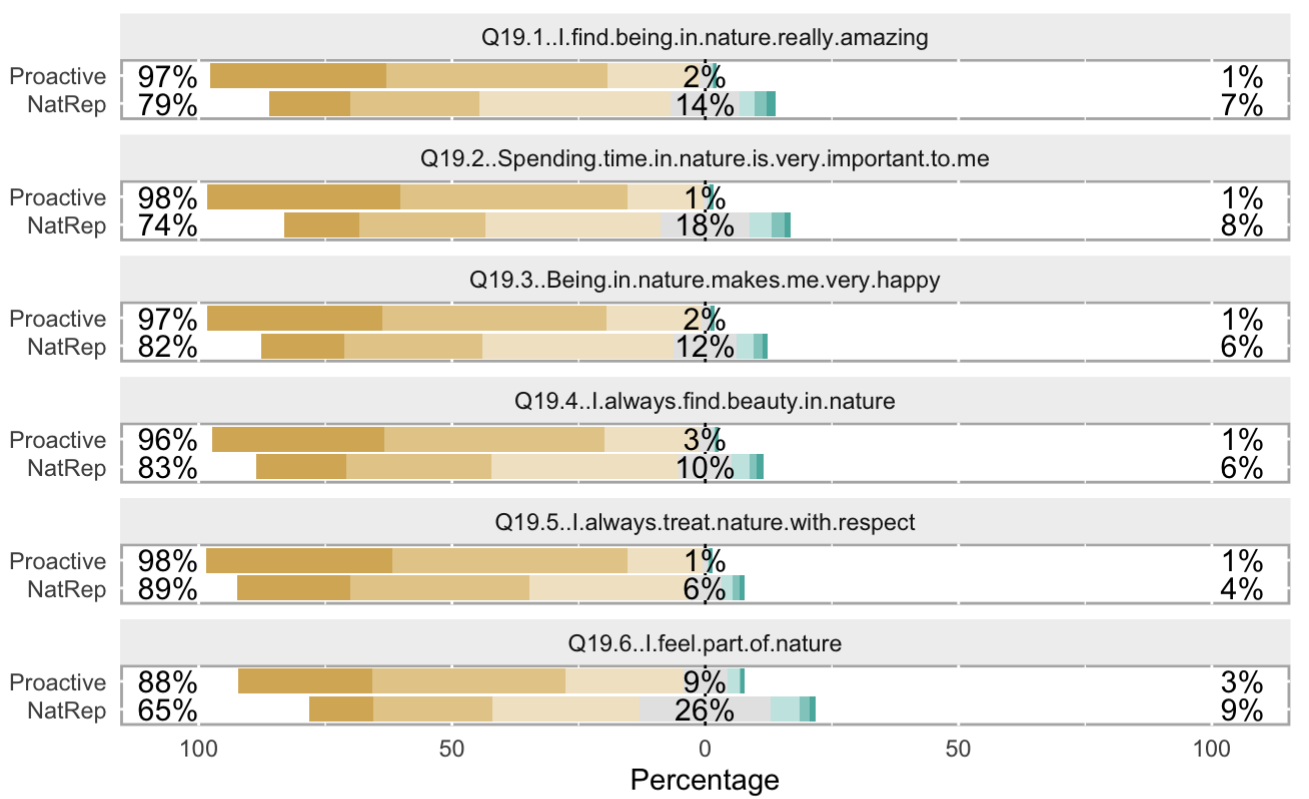


## Q19) How much do you agree or disagree with the following statements?








- I find being in nature really amazing
- Spending time in nature is very important to me
- Being in nature makes me very happy
- I always find beauty in nature
- I always treat nature with respect
- I feel part of nature

[options] Completely disagree = 1, Strongly disagree = 2, Disagree = 3, Neither agree or disagree = 4, Agree = 5, Strongly agree = 6, Completely agree = 7

```
## [1] "Agree" "Completely agree"
## [3] "Completely disagree" "Disagree"
## [5] "Neither agree or disagree" "Strongly agree"
## [7] "Strongly disagree"
```



Response

	Completely agree		Agree		Disagree		Completely disagree
	Strongly agree		Neither agree or disagree		Strongly disagree		

```
## Q19.1..I.find.being.in.nature.really.amazing
## 1 Strongly agree
## 2 Completely agree
## 3 Completely agree
## 4 Strongly agree
## 5 Completely agree
## 6 Strongly agree
## Q19.2..Spending.time.in.nature.is.very.important.to.me
## 1 Agree
## 2 Completely agree
## 3 Completely agree
## 4 Strongly agree
## 5 Completely agree
## 6 Strongly agree
## Q19.3..Being.in.nature.makes.me.very.happy
## 1 Agree
## 2 Completely agree
## 3 Completely agree
## 4 Strongly agree
## 5 Completely agree
## 6 Strongly agree
## Q19.4..I.always.find.beauty.in.nature
## 1 Agree
## 2 Completely agree
## 3 Completely agree
## 4 Strongly agree
## 5 Completely agree
## 6 Strongly agree
## Q19.5..I.always.treat.nature.with.respect Q19.6..I.feel.part.of.nature
## 1 Agree Neither agree or disagree
## 2 Completely agree Completely agree
## 3 Completely agree Completely agree
## 4 Disagree Disagree
## 5 Completely agree Completely agree
## 6 Strongly agree Strongly agree
## SurveyType UniqueID_all
## 1 Proactive 1
## 2 Proactive 2
## 3 Proactive 3
## 4 Proactive 4
## 5 Proactive 5
## 6 Proactive 6
```

```
## # A tibble: 3,615 x 5
## # Groups:   SurveyType, NCI_questions [14]
## SurveyType NCI_questions Answer n Percent
## <fct> <chr> <chr> <int> <dbl>
## 1 NatRep Q19.1..I.find.being.in.nature.real... Agree 433 37.9
## 2 NatRep Q19.1..I.find.being.in.nature.real... Completely agree 183 16.0
## 3 NatRep Q19.1..I.find.being.in.nature.real... Completely disa... 22 1.92
## 4 NatRep Q19.1..I.find.being.in.nature.real... Disagree 34 2.97
## 5 NatRep Q19.1..I.find.being.in.nature.real... Neither agree o... 155 13.6
## 6 NatRep Q19.1..I.find.being.in.nature.real... Strongly agree 290 25.4
## 7 NatRep Q19.1..I.find.being.in.nature.real... Strongly disagr... 26 2.27
## 8 NatRep Q19.2..Spending.time.in.nature.is.... Agree 396 34.6
## 9 NatRep Q19.2..Spending.time.in.nature.is.... Completely agree 170 14.9
## 10 NatRep Q19.2..Spending.time.in.nature.is.... Completely disa... 14 1.22
## # ... with 3,605 more rows
```

## Q20) In relation to the UK, how concerned are you about:

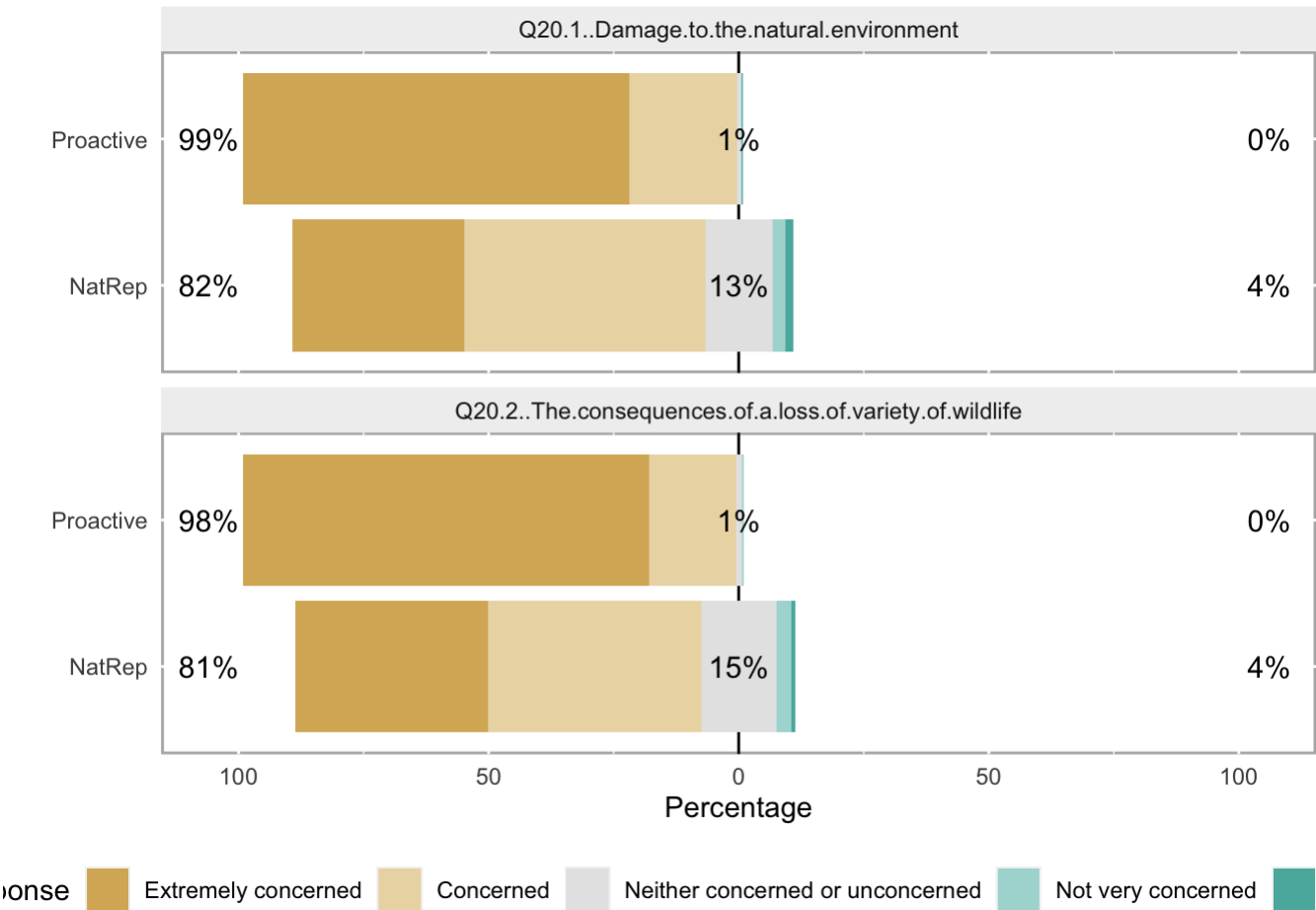
- Damage to the natural environment
- The consequences of a loss of variety of wildlife

[options] Not at all concerned = 1, Not very concerned = 2, Neither concerned or unconcerned = 3, Concerned = 4, Extremely concerned = 5

## [1] "Concerned" "Extremely concerned"

## [3] "Neither concerned or unconcerned" "Not at all concerned"

## [5] "Not very concerned"



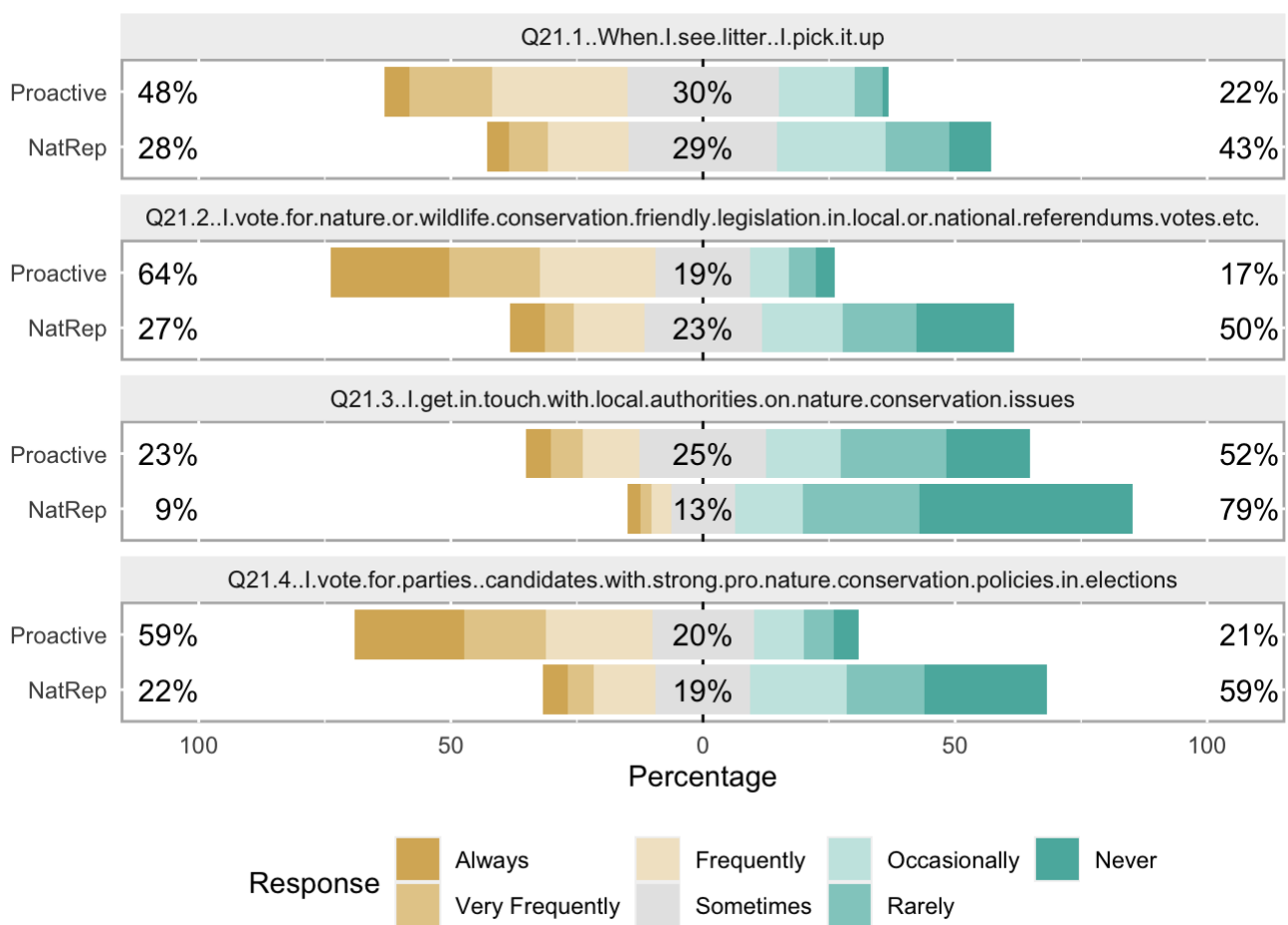
## Q21) How often do you do the actions below when you have the opportunity?

- When I see litter, I pick it up.
- I vote for nature or wildlife conservation friendly legislation in local or national referendums/votes/etc.
- I get in touch with local authorities on nature conservation issues.
- I vote for parties/ candidates with strong pro-nature conservation policies in elections.

[Options] Never = 1, Rarely = 2, Occasionally = 3, Sometimes = 4, Frequently = 5, Very frequently = 6, Always = 7

## [1] "Always" "Frequently" "Never" "Occasionally"

## [5] "Rarely" "Sometimes" "Very Frequently"

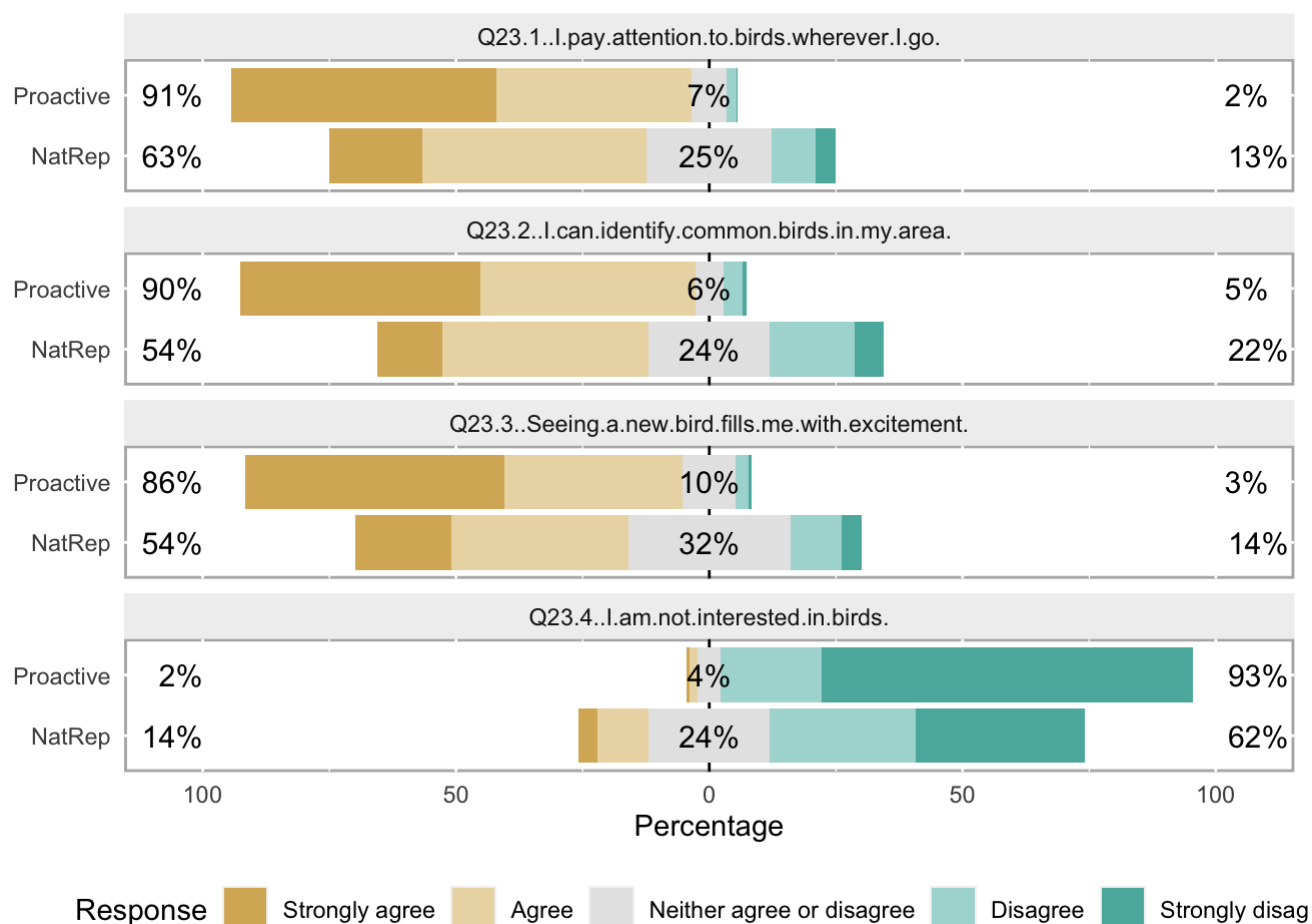


## Q23) Thinking about your daily life, how much do you agree or disagree with the following statements?

- I pay attention to birds wherever I go.
- I can identify common birds in my area.
- Seeing a new bird fills me with excitement.
- I am not interested in birds.

[Options] Strongly Disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly Agree = 5. [†reverse scored]





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