**Supplementary material**

Table S1: Number of ~10,000 km2 cells sampled for amphibians per country in the following groupings of sampling events (SEv): 0, 1-2, 3-4,5-15,16-45, 46-75,76-105,106-122 and sum of all cells with more than 5 SEv.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Sampling events | | | | | | | | |  |
| Country | 0 | 1-2 | 3-4 | 5-15 | 16-45 | 46-75 | 76-105 | 106-122 | Sum > 5 | SEv/Km2 |
| Algeria | 260 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2308857.818 |
| Angola | 106 | 41 | 7 | 1 | 0 | 0 | 0 | 0 | 1 | 1244654.314 |
| Benin | 7 | 11 | 4 | 2 | 0 | 0 | 0 | 0 | 2 | 116113.309 |
| Botswana | 52 | 20 | 5 | 3 | 0 | 0 | 0 | 0 | 3 | 579029.2005 |
| Burkina Faso | 37 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 272769.3967 |
| Burundi | 3 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 27041.2663 |
| Cabo Verde | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3883.142708 |
| Cameroon | 34 | 20 | 3 | 9 | 7 | 0 | 0 | 0 | 16 | 464319.2783 |
| Central African Republic | 82 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 617984.24 |
| Chad | 156 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1266282.336 |
| Comoros | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1672.226921 |
| Democratic Republic of the Congo | 179 | 65 | 20 | 16 | 3 | 0 | 0 | 0 | 19 | 2325240.424 |
| Djibouti | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21847.6141 |
| Egypt | 107 | 7 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 1001078.547 |
| Equatorial Guinea | 7 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 26671.69086 |
| Eritrea | 22 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 122537.7388 |
| eSwatini | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 4 | 17111.84504 |
| Ethiopia | 102 | 22 | 12 | 5 | 0 | 0 | 0 | 0 | 5 | 1127375.98 |
| Gabon | 19 | 18 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 259968.4847 |
| Gambia | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10500.89704 |
| Ghana | 14 | 15 | 6 | 3 | 1 | 0 | 0 | 0 | 4 | 238668.677 |
| Guinea | 32 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 244301.9801 |
| Guinea-Bissau | 3 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 32829.62807 |
| Ivory Coast | 29 | 13 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 320677.1569 |
| Kenya | 31 | 20 | 10 | 13 | 4 | 0 | 0 | 0 | 17 | 585702.5844 |
| Lesotho | 1 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 30106.51807 |
| Liberia | 10 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 95298.15395 |
| Libya | 198 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1623760.9 |
| Madagascar | 47 | 23 | 7 | 5 | 1 | 0 | 0 | 0 | 6 | 592983.8843 |
| Malawi | 13 | 5 | 3 | 5 | 0 | 0 | 0 | 0 | 5 | 119397.7665 |
| Mali | 161 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1252723.657 |
| Mauritania | 121 | 5 | 6 | 1 | 0 | 0 | 0 | 0 | 1 | 1036391.824 |
| Morocco | 53 | 24 | 6 | 4 | 0 | 0 | 0 | 0 | 4 | 591745.2469 |
| Mozambique | 70 | 30 | 7 | 5 | 0 | 0 | 0 | 0 | 5 | 788448.536 |
| Namibia | 51 | 37 | 17 | 4 | 0 | 0 | 0 | 0 | 4 | 822713.0502 |
| Niger | 143 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1181300.892 |
| Nigeria | 98 | 11 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 907501.0844 |
| Republic of the Congo | 46 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 344888.6767 |
| Rwanda | 2 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 25305.05492 |
| São Tomé and Principe | -1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 3 | 1037.156137 |
| Senegal | 25 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 196224.2971 |
| Sierra Leone | 4 | 7 | 2 | 2 | 0 | 0 | 0 | 0 | 2 | 71611.71499 |
| Somalia | 59 | 8 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 471815.0034 |
| Somaliland | 23 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 167406.9577 |
| South Africa | 38 | 33 | 17 | 49 | 25 | 1 | 0 | 0 | 75 | 1219826.728 |
| South Sudan | 80 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 626861.8322 |
| Sudan | 221 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1857637.067 |
| Togo | 9 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 56863.47734 |
| Tunisia | 25 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 156611.6936 |
| Uganda | 19 | 8 | 1 | 6 | 1 | 0 | 0 | 0 | 7 | 241853.6302 |
| United Republic of Tanzania | 52 | 33 | 13 | 22 | 2 | 0 | 0 | 0 | 24 | 941505.9871 |
| Western Sahara | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90494.88906 |
| Zambia | 66 | 30 | 4 | 5 | 0 | 0 | 0 | 0 | 5 | 751914.9431 |
| Zimbabwe | 32 | 13 | 8 | 3 | 0 | 0 | 0 | 0 | 3 | 389337.4811 |

Table S2: Number of ~10,000 km2 cells sampled for mammals per country in the following groupings of sampling events (SEv): 0, 1-2, 3-4,5-15,16-45, 46-75,76-105,106-122 and sum of all cells with more than 5 SEv

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Sampling events | | | | | | | | |  |
| Country | 0 | 1-2 | 3-4 | 5-15 | 16-45 | 46-75 | 76-105 | 106-122 | Sum > 5 | SEv/Km2 |
| Algeria | 234 | 32 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2308857.818 |
| Angola | 111 | 40 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 1244654.314 |
| Benin | 1 | 2 | 3 | 13 | 5 | 0 | 0 | 0 | 18 | 116113.309 |
| Botswana | 30 | 30 | 9 | 11 | 0 | 0 | 0 | 0 | 11 | 579029.2005 |
| Burkina Faso | 16 | 16 | 3 | 5 | 0 | 0 | 0 | 0 | 5 | 272769.3967 |
| Burundi | 4 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 27041.2663 |
| Cabo Verde | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3883.142708 |
| Cameroon | 31 | 18 | 6 | 13 | 5 | 0 | 0 | 0 | 18 | 464319.2783 |
| Central African Republic | 69 | 10 | 2 | 4 | 1 | 0 | 0 | 0 | 5 | 617984.24 |
| Chad | 131 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1266282.336 |
| Comoros | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1672.226921 |
| Democratic Republic of the Congo | 122 | 77 | 29 | 42 | 13 | 0 | 0 | 0 | 55 | 2325240.424 |
| Djibouti | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21847.6141 |
| Egypt | 41 | 39 | 14 | 20 | 3 | 0 | 0 | 0 | 23 | 1001078.547 |
| Equatorial Guinea | 4 | 5 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 26671.69086 |
| Eritrea | 25 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122537.7388 |
| eSwatini | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17111.84504 |
| Ethiopia | 72 | 40 | 13 | 16 | 0 | 0 | 0 | 0 | 16 | 1127375.98 |
| Gabon | 21 | 12 | 6 | 2 | 0 | 0 | 0 | 0 | 2 | 259968.4847 |
| Gambia | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10500.89704 |
| Ghana | 10 | 15 | 4 | 10 | 0 | 0 | 0 | 0 | 10 | 238668.677 |
| Guinea | 13 | 17 | 5 | 5 | 0 | 0 | 0 | 0 | 5 | 244301.9801 |
| Guinea-Bissau | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32829.62807 |
| Ivory Coast | 6 | 22 | 7 | 7 | 2 | 0 | 0 | 0 | 9 | 320677.1569 |
| Kenya | 20 | 14 | 9 | 20 | 11 | 4 | 0 | 0 | 35 | 585702.5844 |
| Lesotho | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30106.51807 |
| Liberia | 6 | 3 | 6 | 7 | 0 | 0 | 0 | 0 | 7 | 95298.15395 |
| Libya | 172 | 25 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1623760.9 |
| Madagascar | 23 | 23 | 14 | 22 | 1 | 0 | 0 | 0 | 23 | 592983.8843 |
| Malawi | 10 | 7 | 5 | 4 | 0 | 0 | 0 | 0 | 4 | 119397.7665 |
| Mali | 113 | 44 | 5 | 3 | 0 | 0 | 0 | 0 | 3 | 1252723.657 |
| Mauritania | 77 | 28 | 13 | 15 | 0 | 0 | 0 | 0 | 15 | 1036391.824 |
| Morocco | 25 | 37 | 18 | 7 | 0 | 0 | 0 | 0 | 7 | 591745.2469 |
| Mozambique | 68 | 39 | 4 | 1 | 0 | 0 | 0 | 0 | 1 | 788448.536 |
| Namibia | 26 | 53 | 16 | 14 | 0 | 0 | 0 | 0 | 14 | 822713.0502 |
| Niger | 114 | 29 | 1 | 4 | 0 | 0 | 0 | 0 | 4 | 1181300.892 |
| Nigeria | 75 | 25 | 9 | 5 | 0 | 0 | 0 | 0 | 5 | 907501.0844 |
| Republic of the Congo | 48 | 7 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 344888.6767 |
| Rwanda | 1 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 4 | 25305.05492 |
| São Tomé and Principe | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1037.156137 |
| Senegal | 7 | 12 | 6 | 5 | 0 | 0 | 0 | 0 | 5 | 196224.2971 |
| Sierra Leone | 4 | 2 | 2 | 6 | 1 | 0 | 0 | 0 | 7 | 71611.71499 |
| Somalia | 63 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 471815.0034 |
| Somaliland | 23 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 167406.9577 |
| South Africa | 40 | 58 | 37 | 25 | 3 | 0 | 0 | 0 | 28 | 1219826.728 |
| South Sudan | 55 | 19 | 7 | 5 | 0 | 0 | 0 | 0 | 5 | 626861.8322 |
| Sudan | 185 | 32 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1857637.067 |
| Togo | 3 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 56863.47734 |
| Tunisia | 12 | 4 | 8 | 6 | 0 | 0 | 0 | 0 | 6 | 156611.6936 |
| Uganda | 3 | 7 | 8 | 12 | 5 | 0 | 0 | 0 | 17 | 241853.6302 |
| United Republic of Tanzania | 37 | 34 | 16 | 29 | 6 | 0 | 0 | 0 | 35 | 941505.9871 |
| Western Sahara | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90494.88906 |
| Zambia | 53 | 32 | 13 | 7 | 0 | 0 | 0 | 0 | 7 | 751914.9431 |
| Zimbabwe | 22 | 24 | 5 | 5 | 0 | 0 | 0 | 0 | 5 | 389337.4811 |

Table S3: Number of ~10,000 km2 cells sampled for birds per country in the following groupings of sampling events (SEv): 0, 1-2, 3-4,5-15,16-45, 46-75,76-105,106-122 and sum of all cells with more than 5 SEv.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Sampling events | | | | | | | | |  |
| Country | 0 | 1-2 | 3-4 | 5-15 | 16-45 | 46-75 | 76-105 | 106-122 | Sum > 5 | SEv/Km2 |
| Algeria | 191 | 35 | 15 | 12 | 13 | 2 | 0 | 0 | 27 | 2.04E-05 |
| Angola | 63 | 40 | 25 | 25 | 2 | 0 | 0 | 0 | 27 | 3.78E-05 |
| Benin | 1 | 4 | 3 | 13 | 3 | 0 | 0 | 0 | 16 | 0.000137796 |
| Botswana | 18 | 16 | 8 | 35 | 3 | 0 | 0 | 0 | 38 | 0.000107076 |
| Burkina Faso | 23 | 14 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 4.03E-05 |
| Burundi | 3 | 0 | 1 | 4 | 1 | 0 | 0 | 0 | 5 | 0.000221883 |
| Cabo Verde | 0 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 2 | 0.002060187 |
| Cameroon | 34 | 19 | 4 | 11 | 5 | 0 | 0 | 0 | 16 | 6.25E-05 |
| Central African Republic | 68 | 15 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 3.24E-06 |
| Chad | 119 | 28 | 7 | 1 | 1 | 0 | 0 | 0 | 2 | 1.03E-05 |
| Comoros | -1 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00119601 |
| Democratic Republic of the Congo | 127 | 66 | 38 | 38 | 11 | 3 | 0 | 0 | 52 | 3.01E-05 |
| Djibouti | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000137315 |
| Egypt | 66 | 30 | 8 | 10 | 3 | 0 | 0 | 0 | 13 | 4.79E-05 |
| Equatorial Guinea | 7 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000187465 |
| Eritrea | 21 | 4 | 1 | 3 | 0 | 0 | 0 | 0 | 3 | 4.08E-05 |
| eSwatini | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 | 0.000233756 |
| Ethiopia | 64 | 46 | 8 | 21 | 2 | 0 | 0 | 0 | 23 | 6.21E-05 |
| Gabon | 21 | 10 | 5 | 5 | 0 | 0 | 0 | 0 | 5 | 6.92E-05 |
| Gambia | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 0.00038092 |
| Ghana | 9 | 17 | 4 | 9 | 0 | 0 | 0 | 0 | 9 | 0.000100558 |
| Guinea | 24 | 12 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 3.27E-05 |
| Guinea-Bissau | 7 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0.000121841 |
| Ivory Coast | 21 | 15 | 2 | 6 | 0 | 0 | 0 | 0 | 6 | 4.99E-05 |
| Kenya | 10 | 14 | 7 | 22 | 17 | 8 | 0 | 0 | 47 | 9.22E-05 |
| Lesotho | 0 | 1 | 0 | 6 | 1 | 0 | 0 | 0 | 7 | 0.000265723 |
| Liberia | 7 | 9 | 5 | 1 | 0 | 0 | 0 | 0 | 1 | 8.39E-05 |
| Libya | 187 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3.70E-06 |
| Madagascar | 12 | 31 | 24 | 13 | 3 | 0 | 0 | 0 | 16 | 8.94E-05 |
| Malawi | 6 | 3 | 3 | 10 | 4 | 0 | 0 | 0 | 14 | 0.000167507 |
| Mali | 115 | 25 | 7 | 16 | 2 | 0 | 0 | 0 | 18 | 1.76E-05 |
| Mauritania | 88 | 28 | 8 | 9 | 0 | 0 | 0 | 0 | 9 | 1.74E-05 |
| Morocco | 22 | 7 | 10 | 20 | 23 | 5 | 0 | 0 | 48 | 0.000108155 |
| Mozambique | 28 | 26 | 19 | 32 | 6 | 1 | 0 | 0 | 39 | 6.09E-05 |
| Namibia | 7 | 25 | 21 | 50 | 6 | 0 | 0 | 0 | 56 | 0.000103317 |
| Niger | 122 | 23 | 1 | 2 | 0 | 0 | 0 | 0 | 2 | 5.08E-06 |
| Nigeria | 62 | 40 | 5 | 7 | 0 | 0 | 0 | 0 | 7 | 2.31E-05 |
| Republic of the Congo | 39 | 11 | 6 | 1 | 0 | 0 | 0 | 0 | 1 | 1.74E-05 |
| Rwanda | 0 | 2 | 1 | 0 | 4 | 0 | 0 | 0 | 4 | 0.000237107 |
| São Tomé and Principe | -1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 3 | 0.002892525 |
| Senegal | 5 | 9 | 4 | 7 | 5 | 0 | 0 | 0 | 12 | 0.000122309 |
| Sierra Leone | 3 | 4 | 5 | 3 | 0 | 0 | 0 | 0 | 3 | 0.000111714 |
| Somalia | 32 | 30 | 3 | 3 | 0 | 0 | 0 | 0 | 3 | 6.36E-06 |
| Somaliland | 12 | 9 | 1 | 5 | 0 | 0 | 0 | 0 | 5 | 2.99E-05 |
| South Africa | -1 | 4 | 1 | 35 | 114 | 7 | 3 | 0 | 159 | 0.000133626 |
| South Sudan | 53 | 19 | 11 | 3 | 0 | 0 | 0 | 0 | 3 | 9.57E-06 |
| Sudan | 190 | 24 | 3 | 4 | 0 | 0 | 0 | 0 | 4 | 2.96E-05 |
| Togo | 6 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0.000140688 |
| Tunisia | 8 | 3 | 2 | 9 | 7 | 1 | 0 | 0 | 17 | 0.000127704 |
| Uganda | 2 | 3 | 5 | 10 | 12 | 3 | 0 | 0 | 25 | 0.000111638 |
| United Republic of Tanzania | 35 | 32 | 16 | 29 | 10 | 0 | 0 | 0 | 39 | 7.75E-05 |
| Western Sahara | 17 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 1.11E-05 |
| Zambia | 41 | 30 | 14 | 19 | 1 | 0 | 0 | 0 | 20 | 6.65E-05 |
| Zimbabwe | 3 | 8 | 8 | 28 | 9 | 0 | 0 | 0 | 37 | 0.000123286 |

Table S4: Spatial regression summary of the model predicting the number of required sampling events until at least 50% of the species of amphibians have been recorded in a particular 1-degree-grid, with the following predictors: IUCN richness, protected areas coverage, human influence, HDI, NPP, elevation.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Amphibians  Estimate (Std. Error) | Mammals  Estimate (Std. Error) | Birds  Estimate (Std. Error) |
| (Intercept) | 11.456(0.708)\*\*\* | 12.174(1.206)\*\*\* | 27.002(2.297)\*\*\* |
| IUCN richness | - | 10.627(1.306) | 7.354(2.968)\* |
| Protected areas | - | - | - |
| Human influence | - | - | - |
| HDI | 1.61(0.715)\* | 4.709(1.306)\*\* | - |
| NPP | - | - | -7.158(2.534)\*\* |
| Elevation | 2.771(0.715)\*\*\* | - | - |
| AICc | 358.6 | 153 | 255.3 |
| R2 (a) | 0.249 | 0.748 | 0.275 |

\* 0.05>p>0.01; \*\* 0.01>p>0.001; \*\*\* p<0.001

(a) We used the adjusted R squared values for the linear model in the amphibians and mammals and the Nagelkerke pseudo R-squared for the SAR model in birds.





Figure S1: Effect of previous knowledge on sampling of amphibians (*p* value < 0.05). The spatial patterns were calculated through logistic regressions between completeness and sampling events in amphibians, mammals and birds, and the sign of the effect mapped per cell. White grid cells were not used in this analysis because they either do not contain any records, have less than five visits or have an expected richness lower than 10. The top row corresponds to the filtered data available from 1801 to 1940; the middle row corresponds to the period of 1982 to 2019; and the bottom panel includes data from 1801 to 2019. Only cells with 5 or more sampling events were included to reduce the effects of overfitting. Bar values represent the number of cells corresponding to negative/positive values. For all three taxa analysed, there is strong and pervasive evidence that previous knowledge leads to increased sampling. All taxa also show a temporal increase in this trend.





Figure S2: Effect of previous knowledge on sampling of mammals (*p* value < 0.05). The spatial patterns were calculated through logistic regressions between completeness and sampling events in amphibians, mammals and birds, and the sign of the effect mapped per cell. White grid cells were not used in this analysis because they either do not contain any records, have less than five visits or have an expected richness lower than 10. The top row corresponds to the filtered data available from 1801 to 1940; the middle row corresponds to the period of 1982 to 2019; and the bottom panel includes data from 1801 to 2019. Only cells with 5 or more sampling events were included to reduce the effects of overfitting. Bar values represent the number of cells corresponding to negative/positive values. For all three taxa analysed, there is strong and pervasive evidence that previous knowledge leads to increased sampling. All taxa also show a temporal increase in this trend.





Figure S3: Effect of previous knowledge on sampling of birds. (*p* value < 0.05). The spatial patterns were calculated through logistic regressions between completeness and sampling events in amphibians, mammals and birds, and the sign of the effect mapped per cell. White grid cells were not used in this analysis because they either do not contain any records, have less than five visits or have an expected richness lower than 10. The top row corresponds to the filtered data available from 1801 to 1940; the middle row corresponds to the period of 1982 to 2019; and the bottom panel includes data from 1801 to 2019. Only cells with 5 or more sampling events were included to reduce the effects of overfitting. Bar values represent the number of cells corresponding to negative/positive values. For all three taxa analysed, there is strong and pervasive evidence that previous knowledge leads to increased sampling. All taxa also show a temporal increase in this trend.