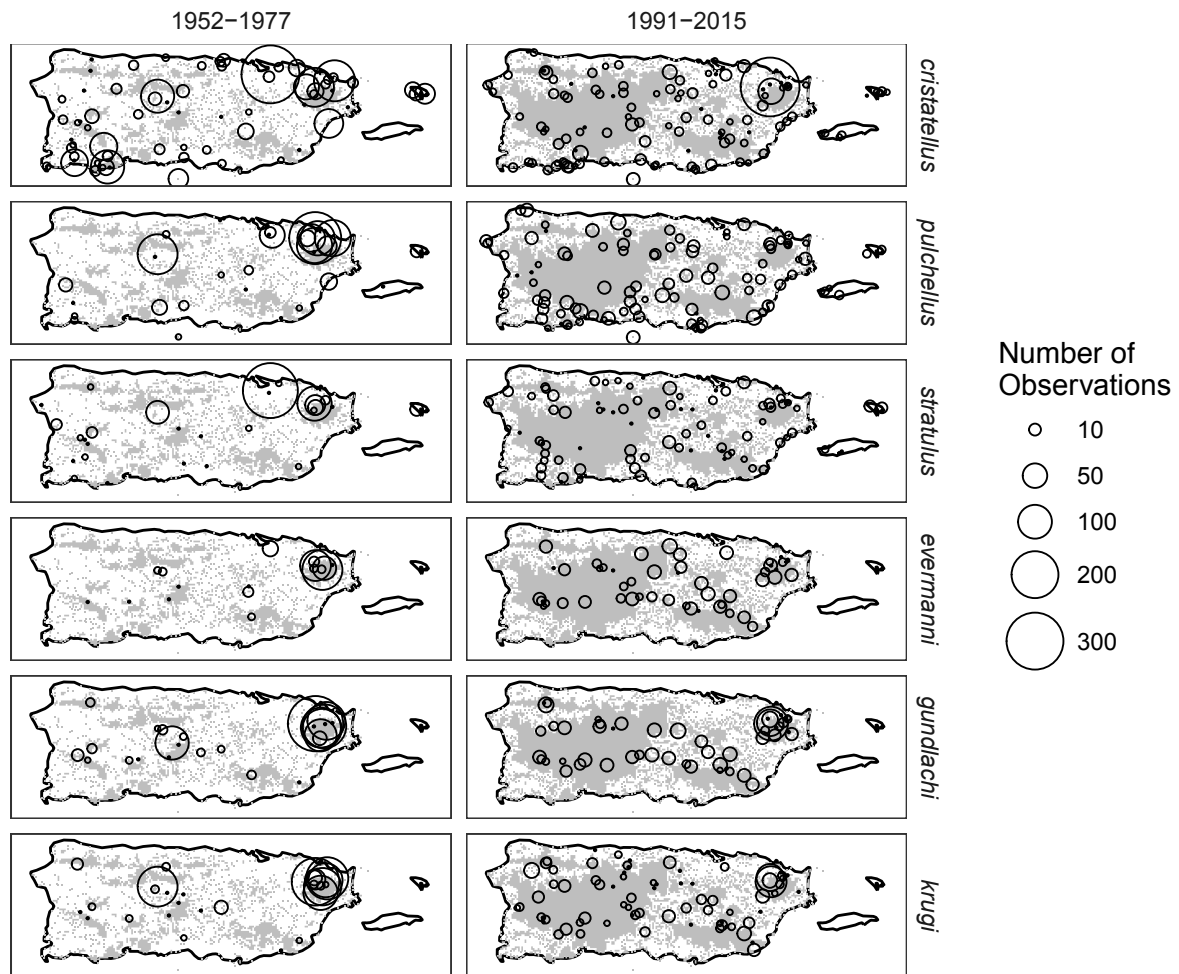


## Supplementary Tables

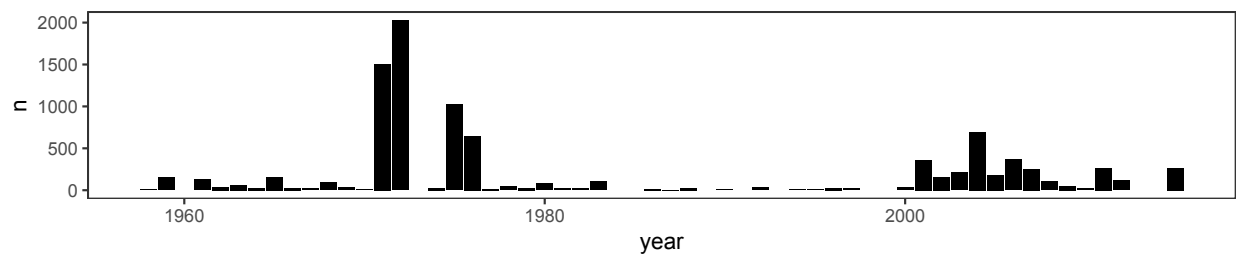
| Species            | Years     | Occurrences |                      |          |         |                | Locality Clusters |                      |          |         |               |
|--------------------|-----------|-------------|----------------------|----------|---------|----------------|-------------------|----------------------|----------|---------|---------------|
|                    |           | <i>n</i>    | Median elevation (m) | Range    | Shift   | <i>p</i>       | <i>n</i>          | Median elevation (m) | Range    | Shift   | <i>p</i>      |
| All                | 1952-1977 | 5823        | 226.79               | 0-1150   | -5.86   | 0.3 (0.005)    | 102               | 86.83                | 0-1150   | -2.35   | 1 (0.72)      |
|                    | 1991-2014 | 3130        | 168.81               | 0-1050   |         |                | 213               | 105.3                | 0-1050   |         |               |
| <i>crisatellus</i> | 1952-1977 | 1513        | 22.06                | 0-880    | 64.4    | <0.01 (<0.001) | 70                | 51.4                 | 0 - 880  | 5.68    | 0.021 (<0.01) |
|                    | 1991-2014 | 837         | 98.07                | 0-942    |         |                | 119               | 84.31                | 0-942    |         |               |
| <i>pulchellus</i>  | 1952-1977 | 1142        | 17.2                 | 0-676    | 3.72    | <0.01 (<0.001) | 32                | 50.23                | 1-676    | -5.31   | 1 (0.762)     |
|                    | 1991-2014 | 613         | 52.51                | 0-761    |         |                | 101               | 52.7                 | 0-756    |         |               |
| <i>stratulus</i>   | 1952-1977 | 582         | 33.05                | 0-880    | 12.49   | <0.01 (<0.001) | 29                | 169.13               | 0-880    | -26.05  | 1 (0.361)     |
|                    | 1991-2014 | 339         | 115.29               | 0-880    |         |                | 93                | 130.08               | 0-880    |         |               |
| <i>evermanni</i>   | 1952-1977 | 353         | 480                  | 15-1150  | -135.37 | <0.01 (<0.001) | 18                | 455.82               | 15-1150  | -112.43 | 1 (0.227)     |
|                    | 1991-2014 | 339         | 323.63               | 1-1050   |         |                | 53                | 390.67               | 1-1050   |         |               |
| <i>gundlachi</i>   | 1952-1977 | 1212        | 480                  | 223-1150 | -135.37 | <0.01 (<0.001) | 27                | 471.56               | 227-1150 | -134.61 | 0.16 (0.027)  |
|                    | 1991-2014 | 539         | 384.99               | 24-1006  |         |                | 53                | 354                  | 24-1001  |         |               |
| <i>krugi</i>       | 1952-1977 | 1021        | 384.99               | 10-1150  | -101.93 | <0.01 (<0.001) | 28                | 378.8                | 53-1150  | -98.95  | 0.69 (0.096)  |
|                    | 1991-2014 | 463         | 277.89               | 1-1006   |         |                | 75                | 256.72               | 1-1006   |         |               |

**Table S1.** Occurrence elevation by species in 1952-1977 and 1991-2015. “Shift” is the median difference in elevation between time periods. *P* values are derived from a Wilcoxon rank-sum test and corrected for multiple comparisons (uncorrected *p* values are included in parentheses), with the null hypothesis set to the median shift across all species other than the focal species.

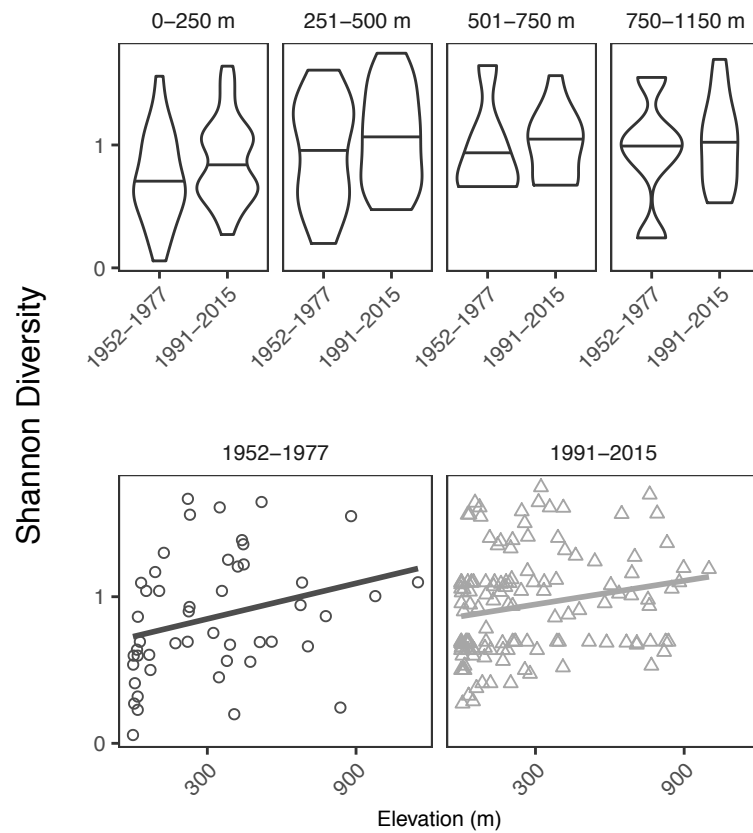
# Supplementary Figures



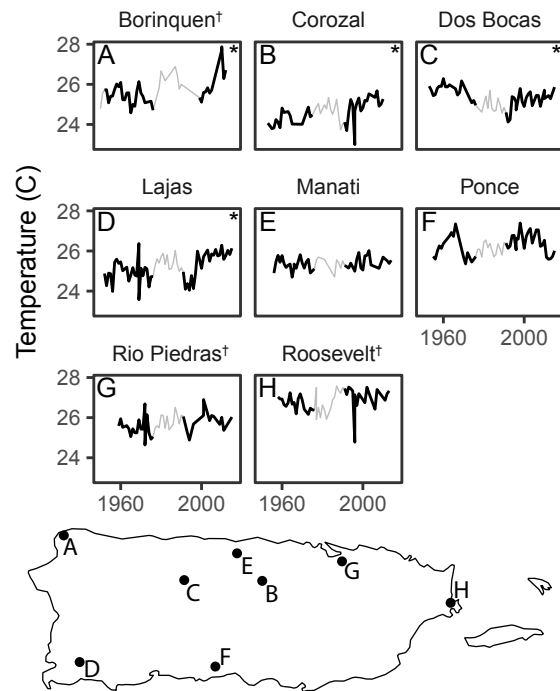
**Figure S1.** Species occurrences and forest land cover, 1952-1977 v 1991-2015. Circles are centered on locality clusters and scaled to the number of observations of each species. Forested areas in each time period are shown in grey.



**Figure S2.** Number of species occurrences by year.



**Figure S3.** (A) Pairwise differences in Shannon diversity of locality clusters across time periods in elevation bins. Asterisks indicate significantly different distributions. (B) linear regression of diversity as a function of locality elevation for each time period.



**Figure S4.** Average annual temperature for NOAA weather stations on Puerto Rico reporting at least 40 years of data with the oldest reports starting no later than 1950. †: station is in an urban area. \*: significant difference in temperatures, 1952-1977 vs. 1991-2015, in a Welch's two-sample *t*-test.