

## Pre-assessments of plant conservation status in islands: the case of French Overseas Territories

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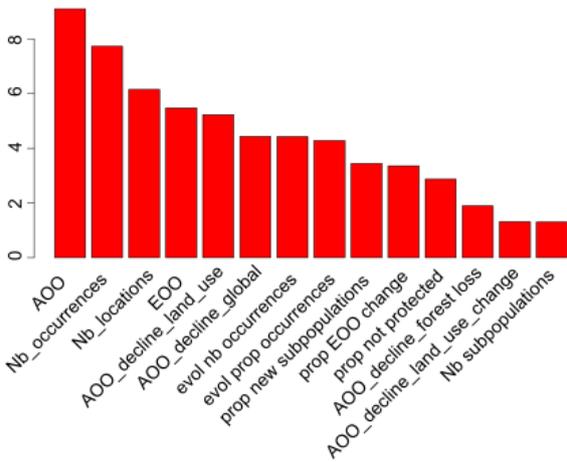
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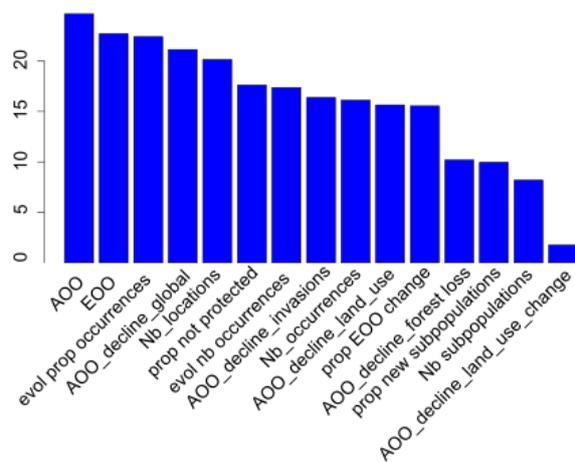
## Supplementary Information 4: Important variables to explain threat statuses

The use of Random Forest made it possible to estimate the most important variables for classifying endemic species among IUCN threat categories. The order of importance of these variables varies between territories, but those that rank first are related to species distribution: AOO, EOO, number of locations, number of observations. Nevertheless, the variables of habitat decline, changes in the proportion of observations, and occurrence outside protected areas also have a relatively important contribution to the classification of species as threatened (Figure S4.1).

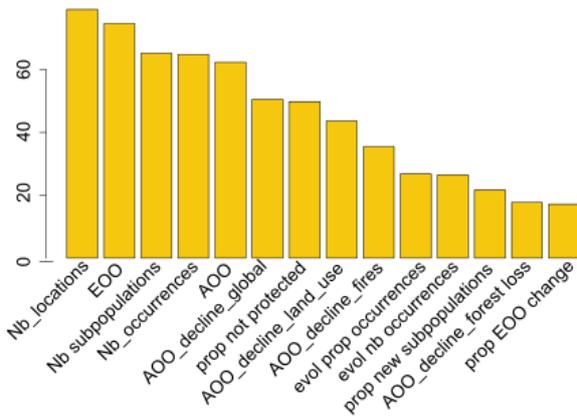
**Mayotte**



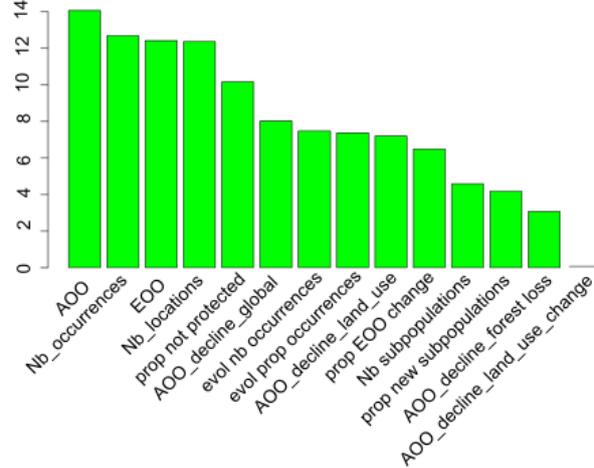
**Réunion**



**New Caledonia**



**Guadeloupe**



**Figure S4.1** Relative importance of variables in predicting IUCN Red List conservation status (not the pre-assessment status) estimated according to a random forest algorithm. This algorithm could not be applied to territories where no or few endemic taxa have a IUCN conservation status. The y-axis corresponds to the Gini's importance values estimated from Random Forest. AOO = Area of Occupancy, EOO = Extent of Occurrence, Nb\_locations = Number of locations, Nb subpopulations= Number of subpopulations, AOO\_decline\_global = AOO of occurrences found in a threatened area (all threats included), AOO\_decline\_fire = AOO of occurrences found in an area threatened by fires, AOO\_decline\_forest = AOO of occurrences found in an area threatened by forest loss, AOO\_decline\_land\_use = AOO of occurrences found in an urban or agricultural area, AOO\_decline\_land\_use\_change = AOO of occurrences found in an area where land use changed, AOO\_decline\_invasion = AOO of occurrences found in an area with high pressure from invasive species, evol prop occurrences = change in the proportion of occurrences of each species over all others compared to a reference date, evol nb occurrences = change in the number of occurrences of each species compared to a reference date, prop EOO change = proportion of EOO change compared to a reference date, prop new subpopulations = proportion of new subpopulations compared to a reference date, prop not protected = proportion of AOO of occurrences found outside protected areas

