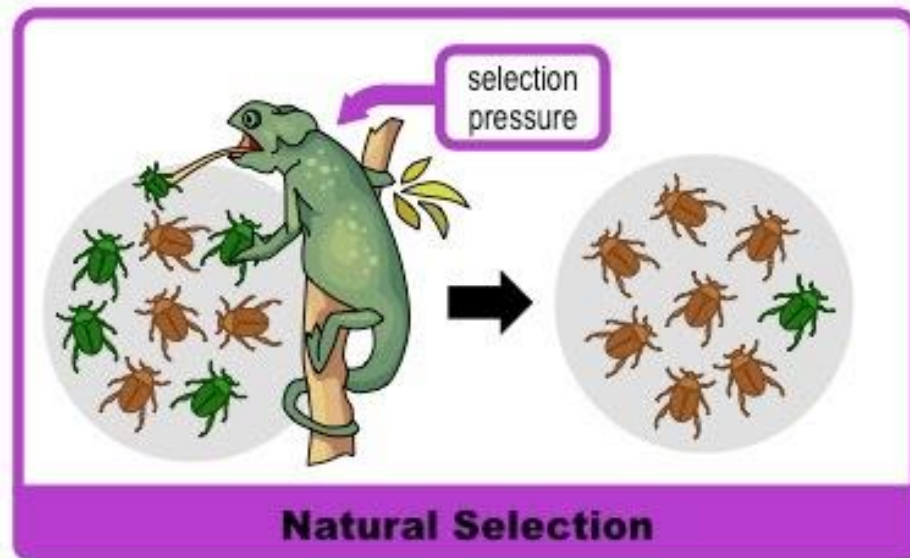
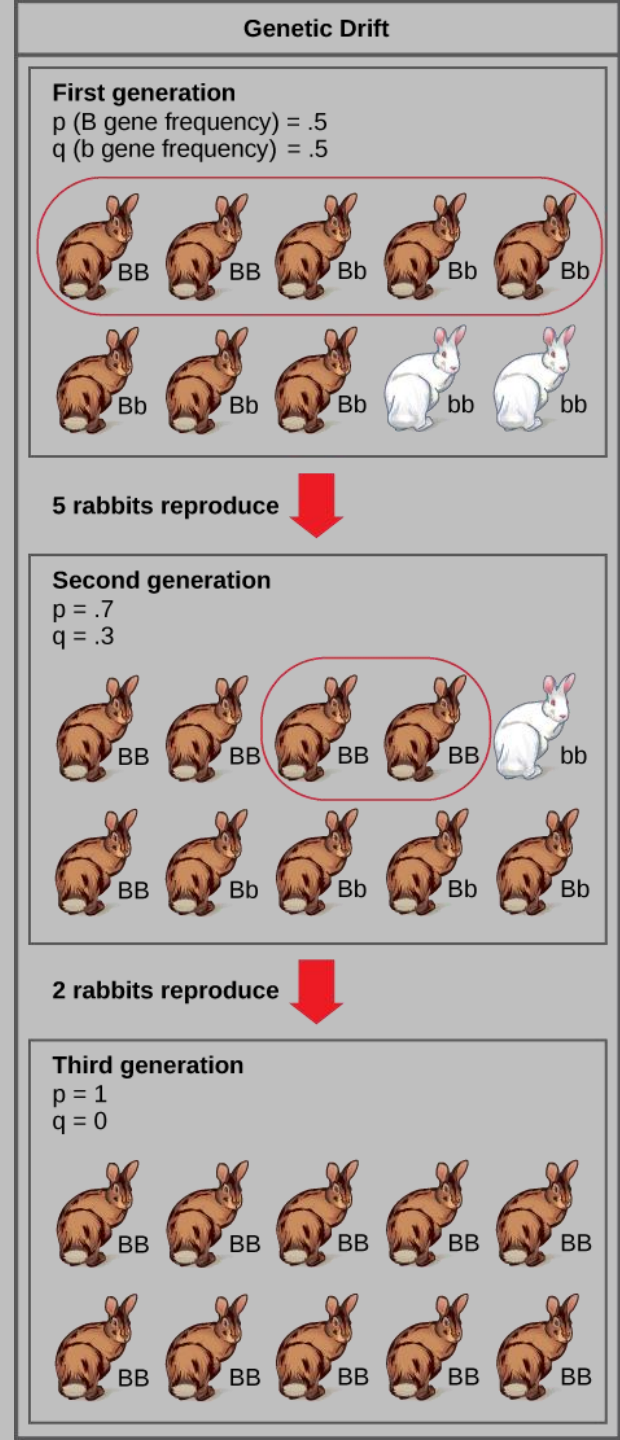


# Factores determinantes en evolución



# Deriva genética

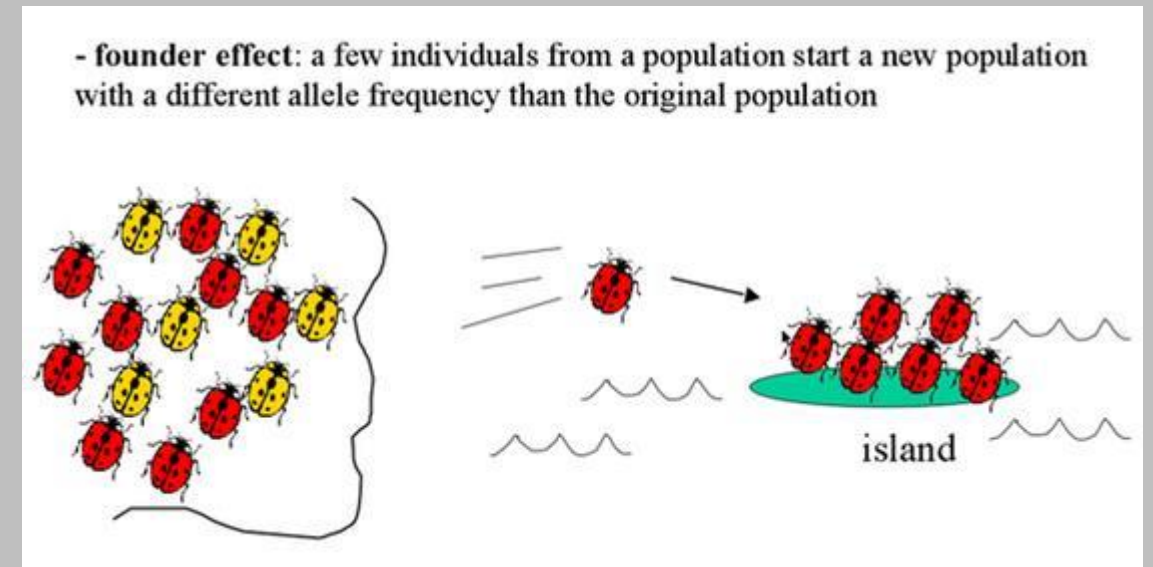
Deriva genética es la pérdida de alelos en una población debido a eventos aleatorios



# Cuello de botella y efecto fundador son dos procesos extremos de deriva génica

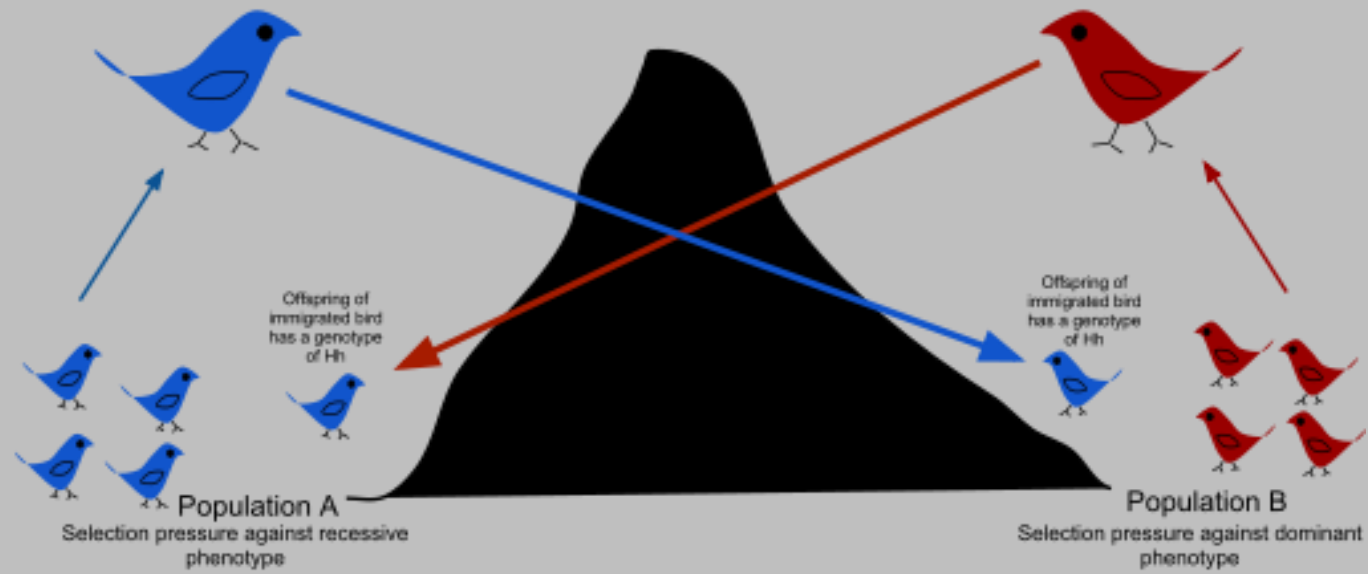


<https://facts.net/science>

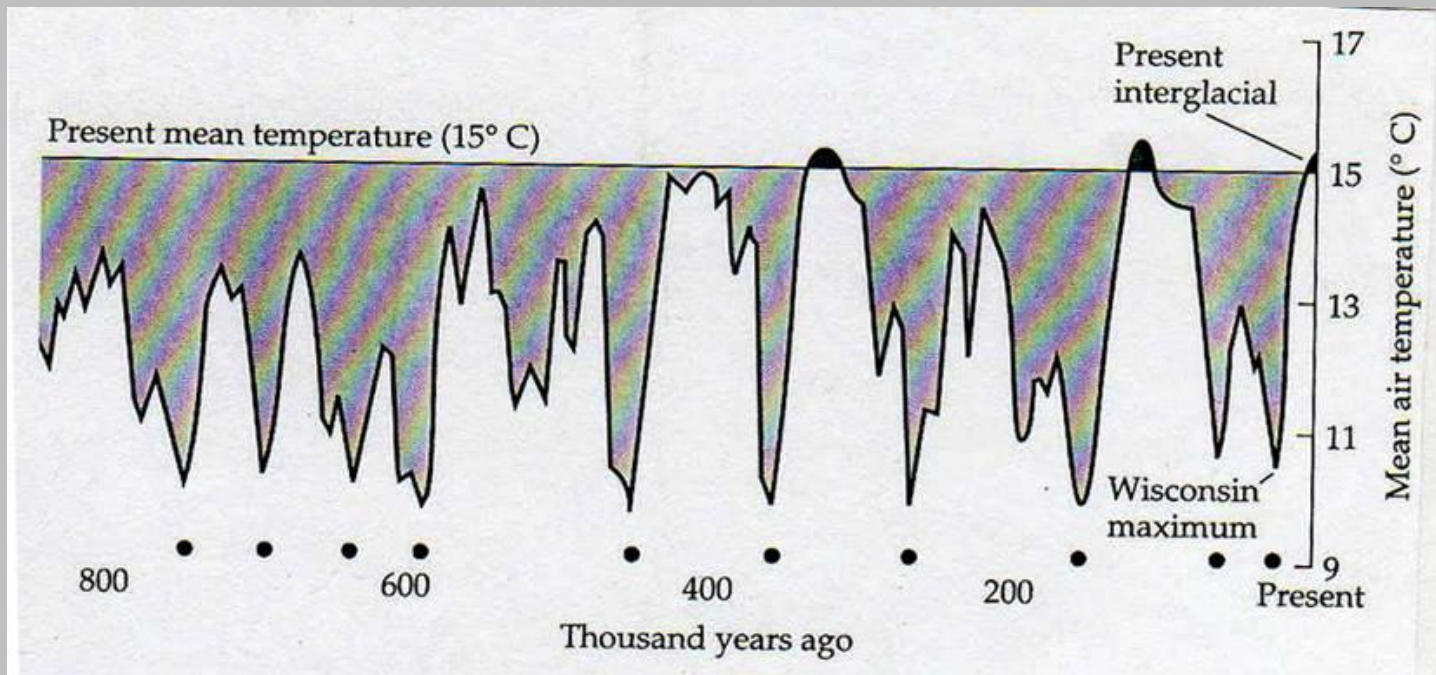


<https://socratic.org/questions>

# Flujo génico

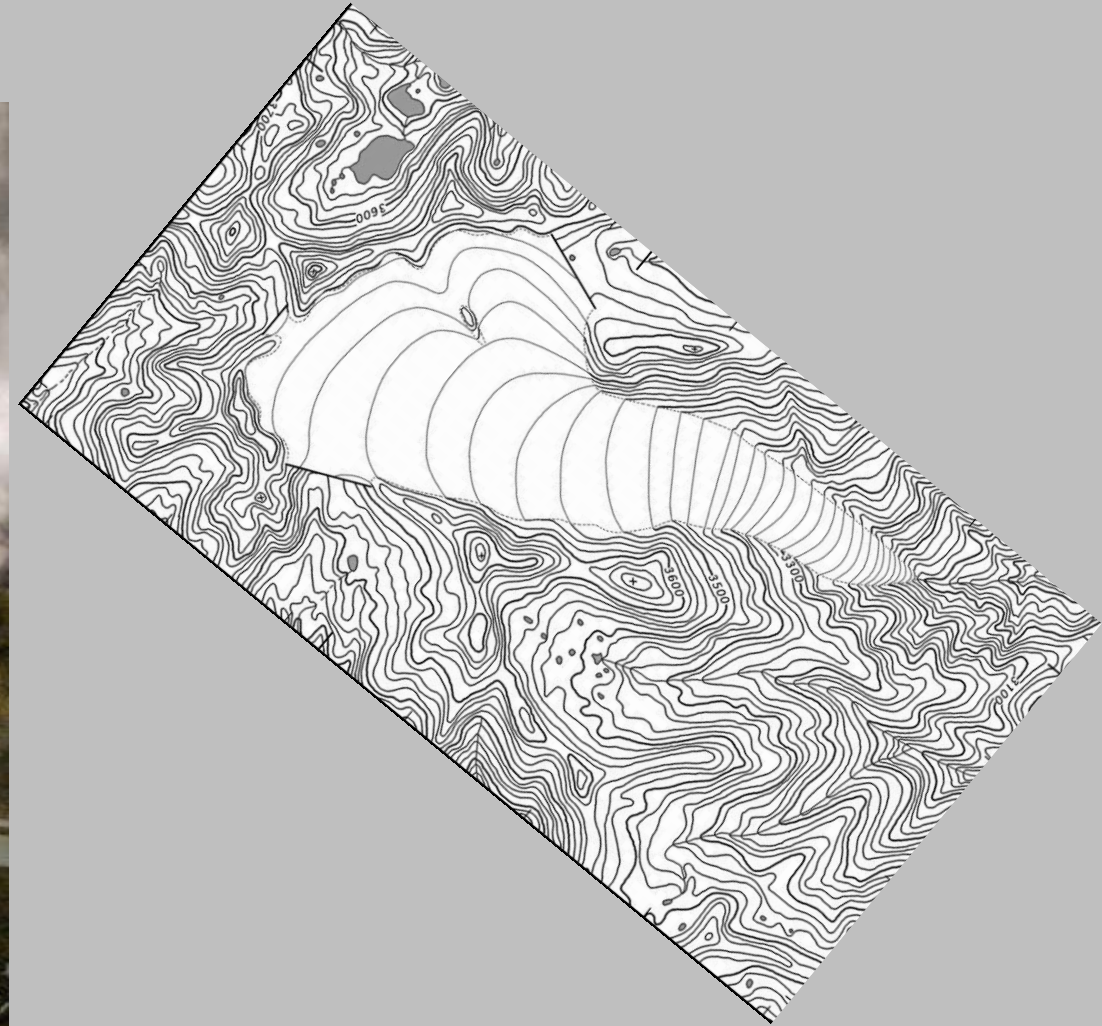


[wikipedia.org/](http://wikipedia.org/)





# ¿Qué pasó en CR?



# *Thryorchilus browni*



Sotobosque  
Parejas territoriales  
Muy vocal

Estructura genética  
(microsats)  
Morfología  
Canto

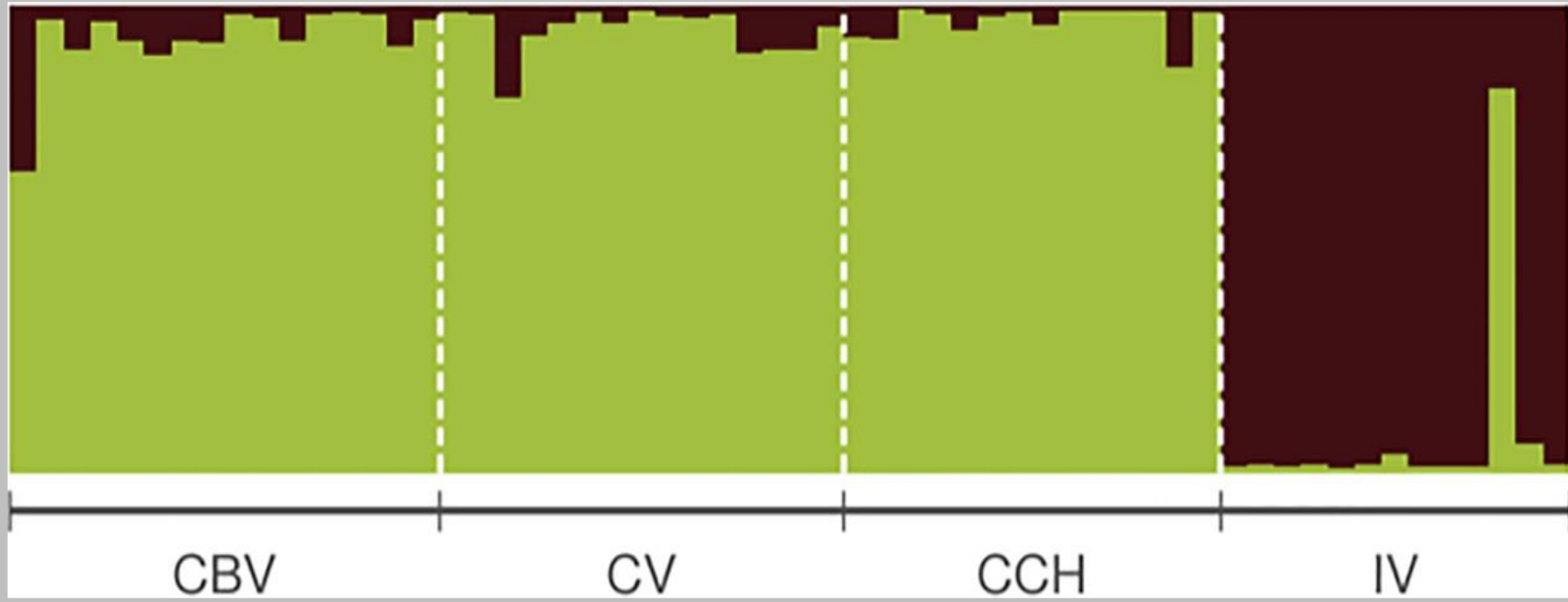




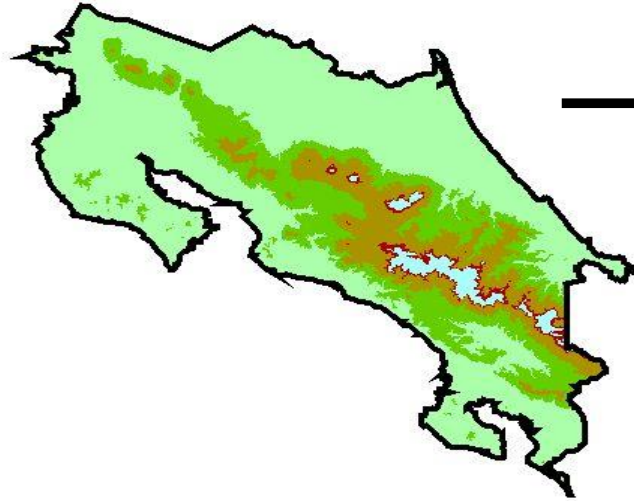
**Table 4. Mean ( $\pm$  sd) genetic diversity estimates for six microsatellite loci from the timberline wren in four populations in Costa Rica.**

Site	n	A	Ae	Ho	He	Fis
CBV	16	6.167 $\pm$ 2.927	3.437 $\pm$ 0.525	0.667 $\pm$ 0.236	0.690 $\pm$ 0.164	0.033
CV	15	5.667 $\pm$ 2.160	3.371 $\pm$ 0.399	0.722 $\pm$ 0.235	0.722 $\pm$ 0.093	-0.022
CCH	14	6.167 $\pm$ 2.317	3.864 $\pm$ 0.700	0.714 $\pm$ 0.202	0.736 $\pm$ 0.134	0.006
IV	13	3.333 $\pm$ 1.211	2.103 $\pm$ 0.316	0.449 $\pm$ 0.281	0.504 $\pm$ 0.219	0.067

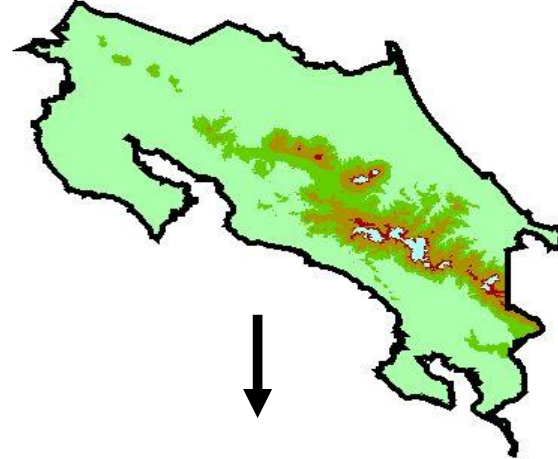
N = number of individuals, A = number of alleles, Ae = number of effective alleles, Ho = observed heterozygosity, He = expected heterozygosity, Fis = Inbreeding coefficient. Populations: CBV = Cerro Buena Vista, CV = Cerro Vueltas, CCH = Cerro Chirripó, IV = Irazú Volcano.



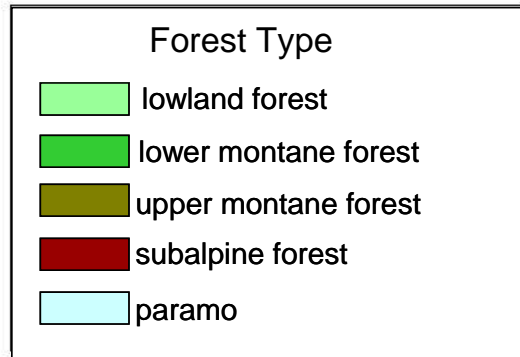
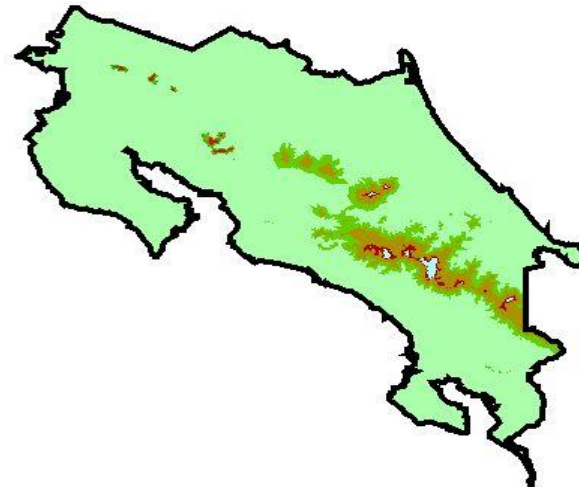
Glacial distribution



Postglacial distribution



Present distribution

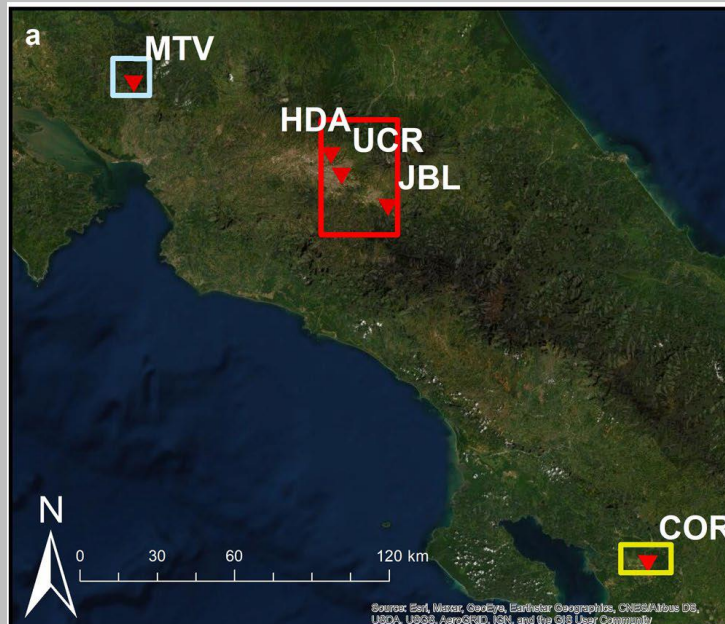




*Troglodytes aedon*  
<https://www.inaturalist.org>



*Melozone leucotis*  
ebird.org

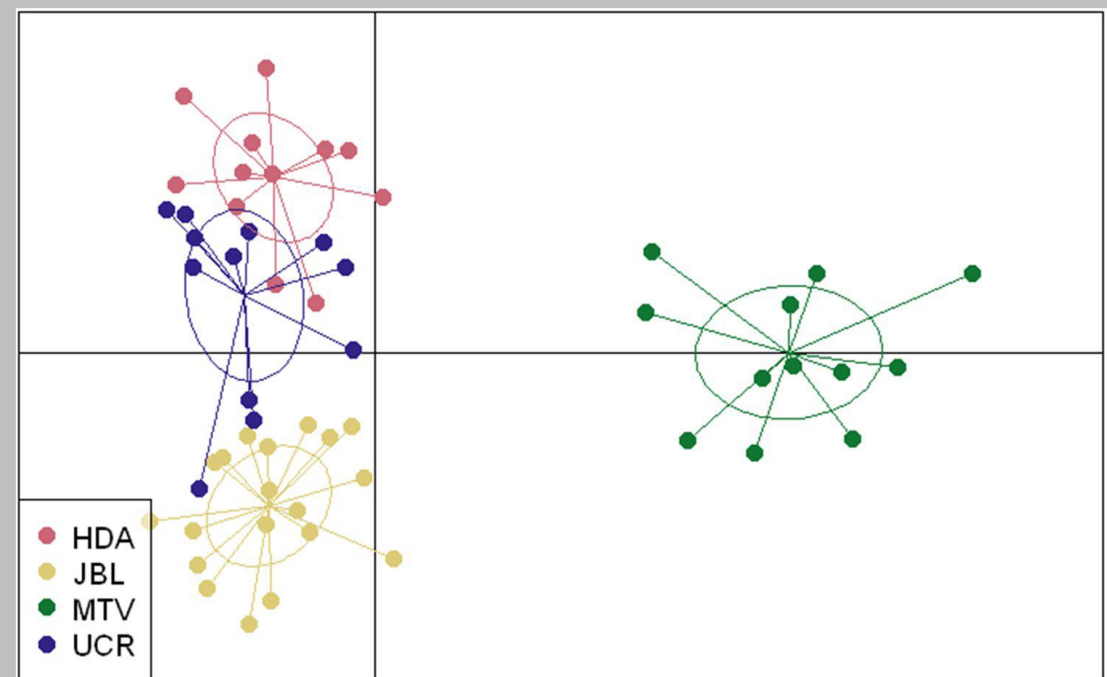
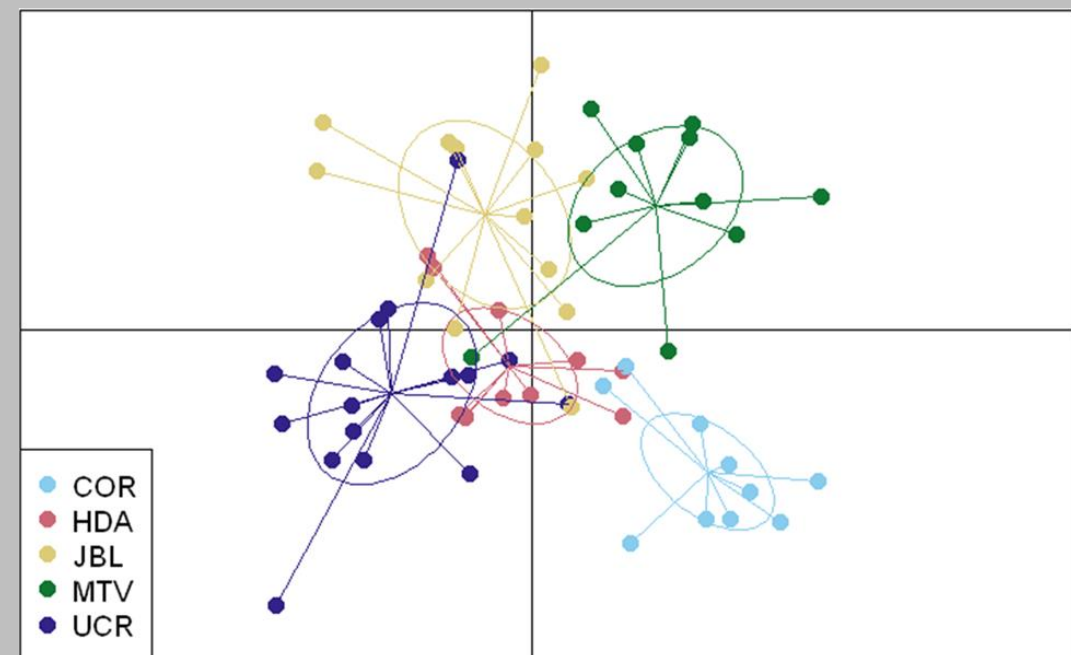


## scientific reports

Check for updates

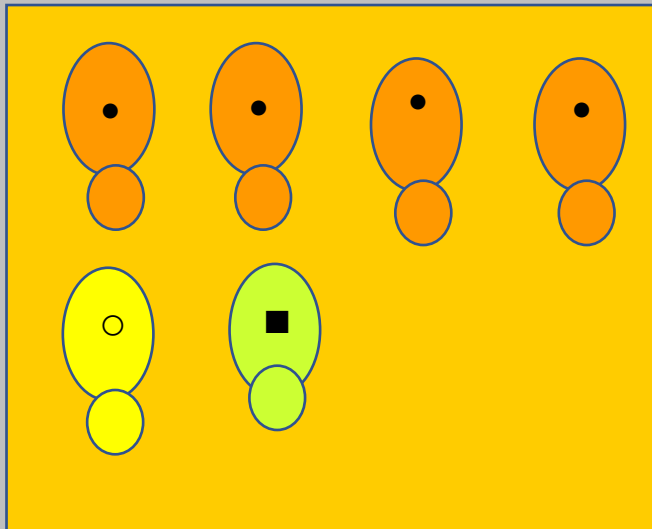
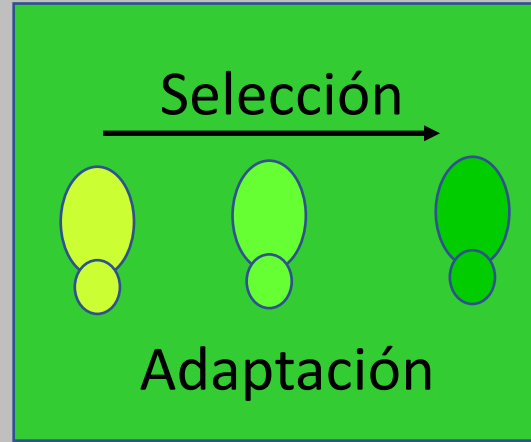
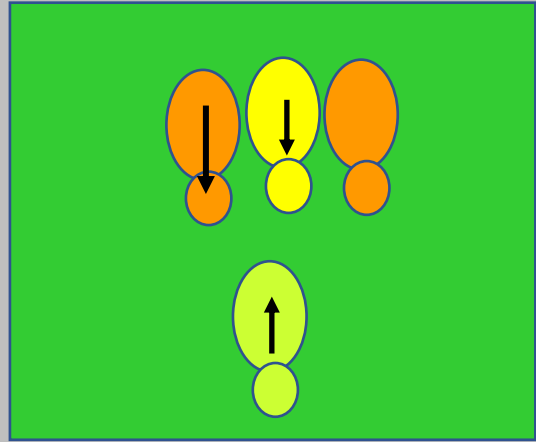
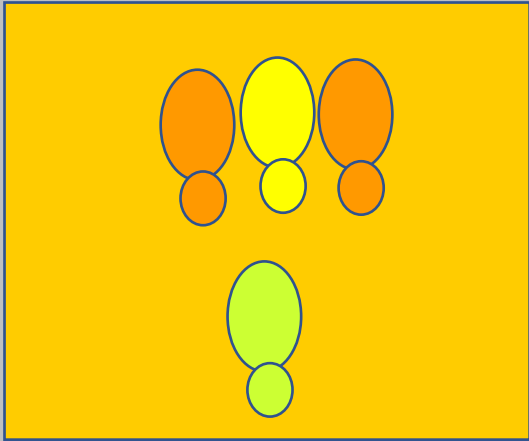
### OPEN Genetic structure in neotropical birds with different tolerance to urbanization

Mauricio Rodríguez-Bardía<sup>1,2,3,4</sup>, Eric J. Fuchs<sup>2</sup>, Gilbert Barrantes<sup>2</sup>, Ruth Madrigal-Brenes<sup>2</sup> & Luis Sandoval<sup>2</sup>

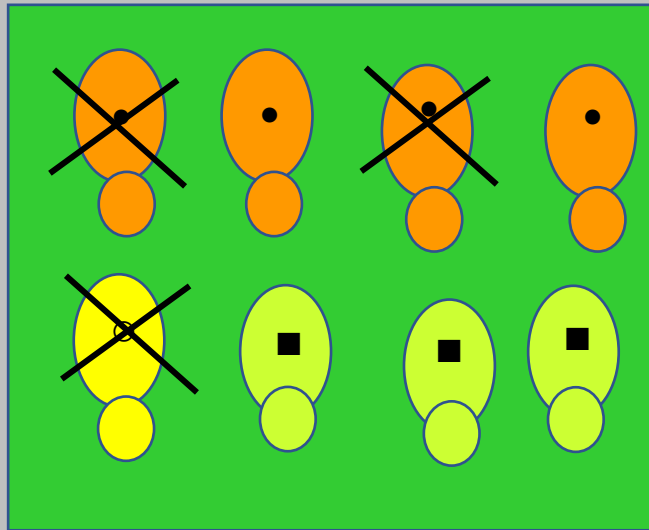




Como la selección natural determina la evolución de una característica en una población



4/1/1



2/0/3