

*Prirodna selekcija
i
ponašanje*

**Seks je ključ uspjeha
u životu!!!!**

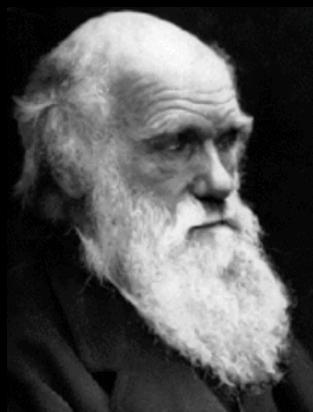
?

Charles Darwin (1809 -1882)

“The Origin of Species” (1859)

“I have called this principle, by which each slight variation, if useful, is preserved, by the term Natural Selection.”

The Origin of Species



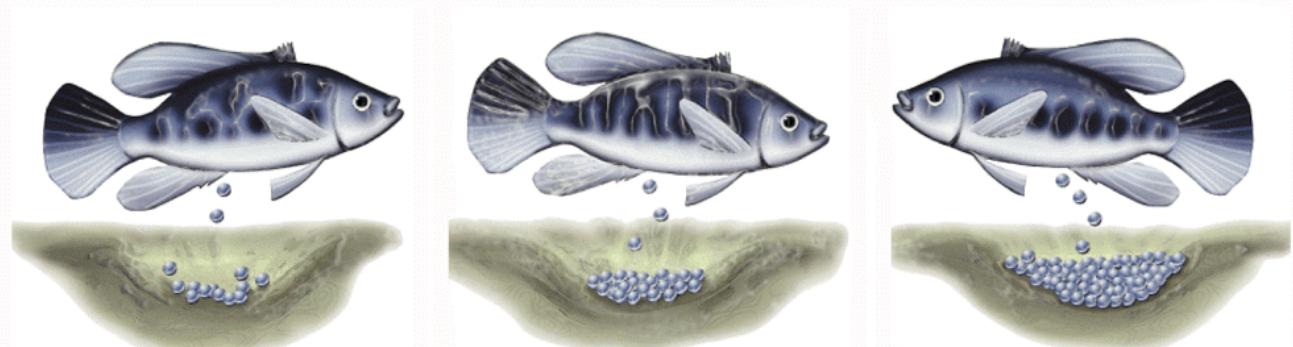
1. Sve životinje imaju vrlo visoki reproduksijski potencijal.
2. Resursi okoliša su ograničeni.
3. Životinje se natječu za resurse okoliša.
4. U svakoj populaciji postoji varijabilnost među jedinkama, a neka su varijabilna svojstva nasljedna. Neka od njih povećavaju vjerovatnost preživljavanja i razmnožavanja.
5. Jedinkama koje posjeduju ta nasljedena svojstva povećava se vjerovatnost preživljavanja do trenutka kada će se moći razmnožavati. Pošto će ta njihova svojstva vjerovatno nasljediti njihovi potomci, frekvencija tih svojstava u populaciji će se povećati.

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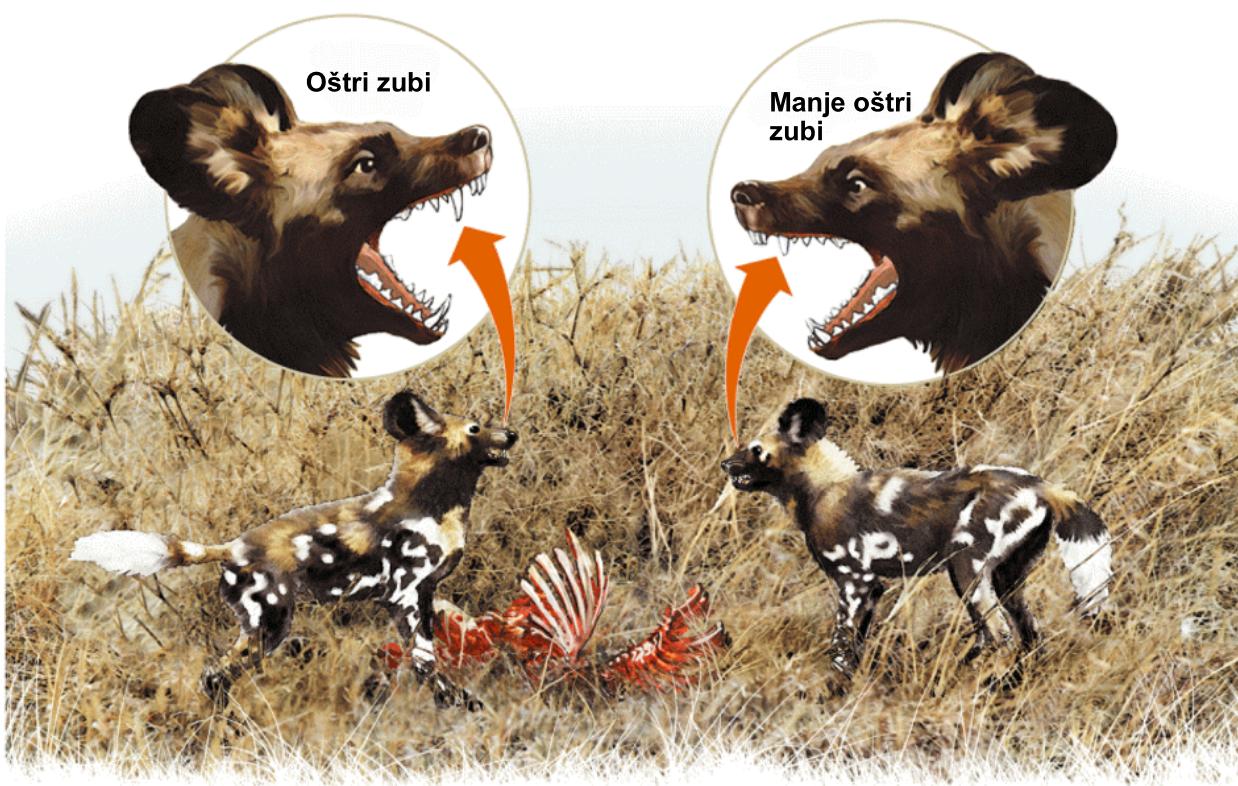
Ženka 1

Ženka 2 (fokalna životinja)

Ženka 3

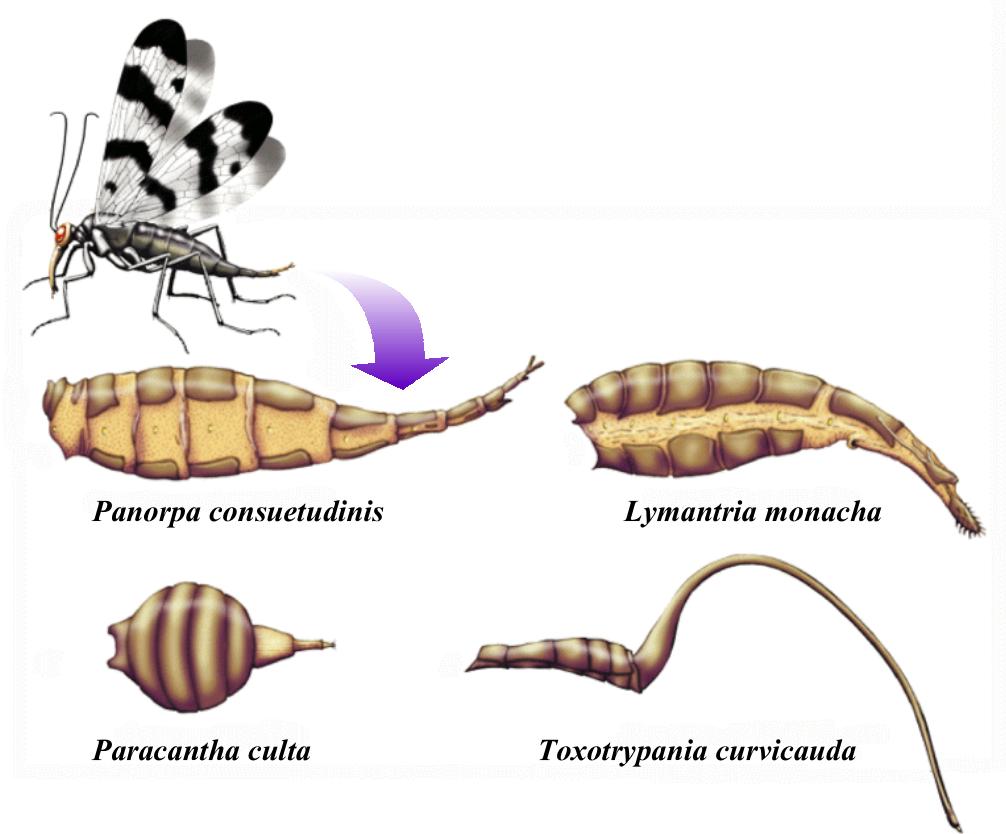


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Lycaon pictus

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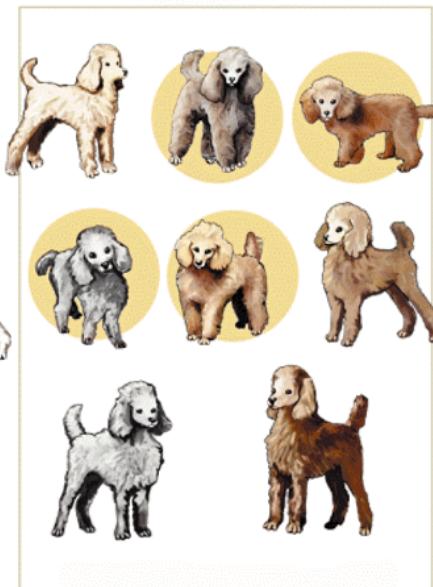
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Generacija 1



Pudli

Generacija 2



Pudli manji od prosjeka

Generacija N

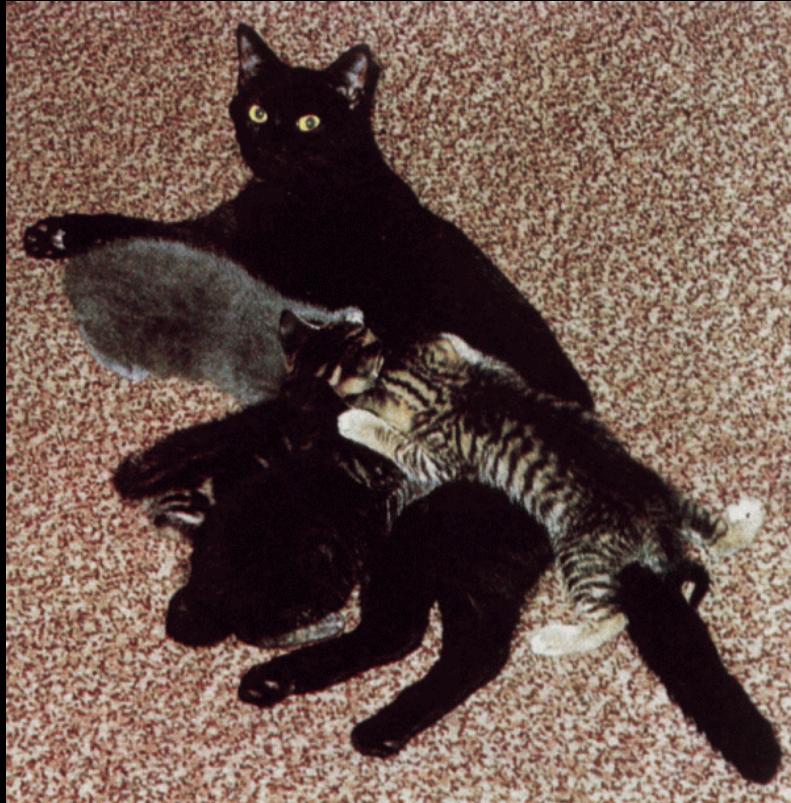


Mali pudli

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Čimbenici koji održavaju gensku varijabilnost:

Selekcija ovisna frekvenciji fenotipa
("Frequency - dependent selection")

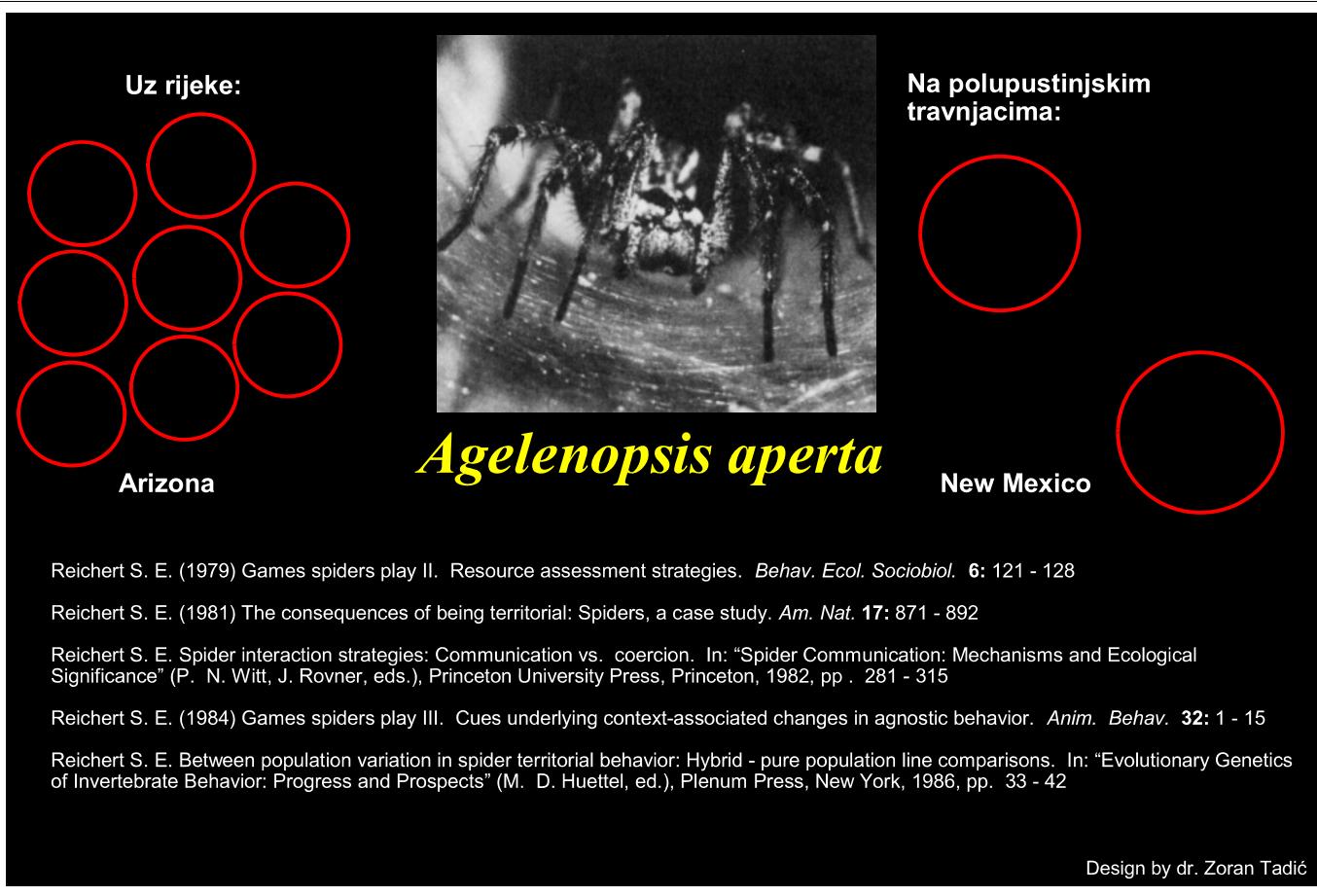
Predacija ovisna frekvenciji fenotipa
("Frequency - dependent predation")

Razmnožavanje ovisno o frekvenciji fenotipa
("Frequency - dependent reproduction")

Negative assortative mating (Hrvatski naziv=?)

Varijacije zbog okoliša ("Environmental variation")

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Things cannot be other than they are. . .Everything is made for the best purpose. Our noses were made to carry spectacles, so we have spectacles. Legs were clearly intended for breeches, so we wear them.

Voltaire “*Candide*”

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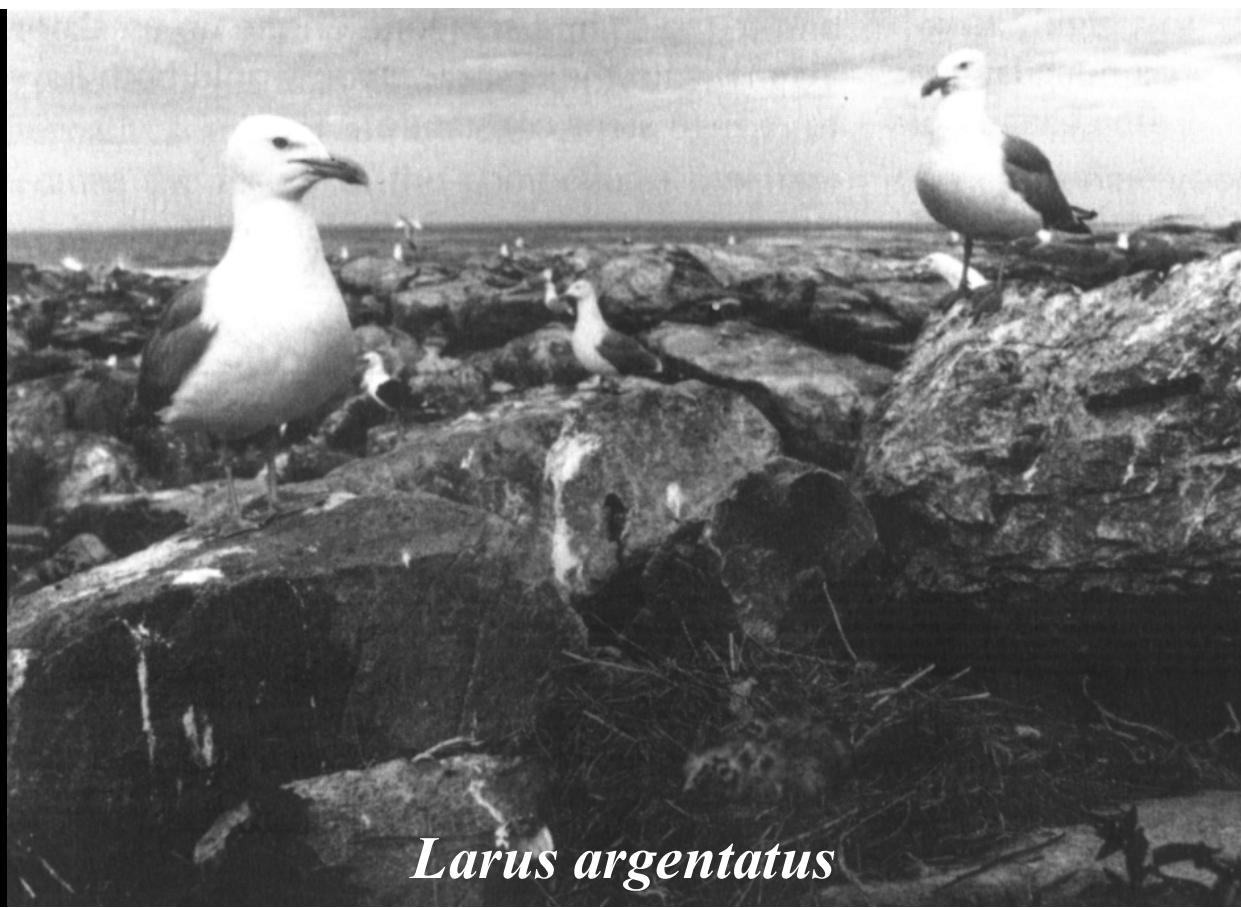


Galeb klaukavac (*Larus argentatus*)



Troprsti galeb (*Rissa tridactyla*)

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Larus argentatus



Rissa tridactyla

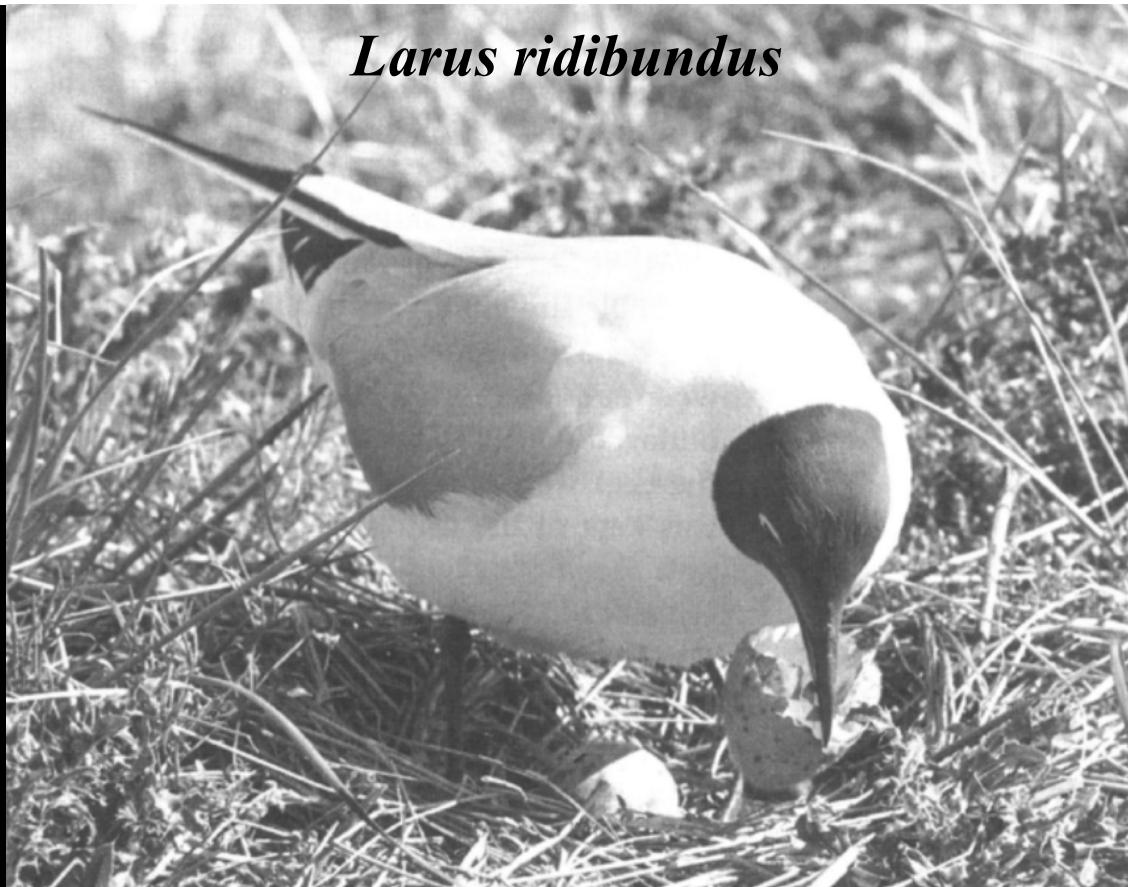


Larus fuscus

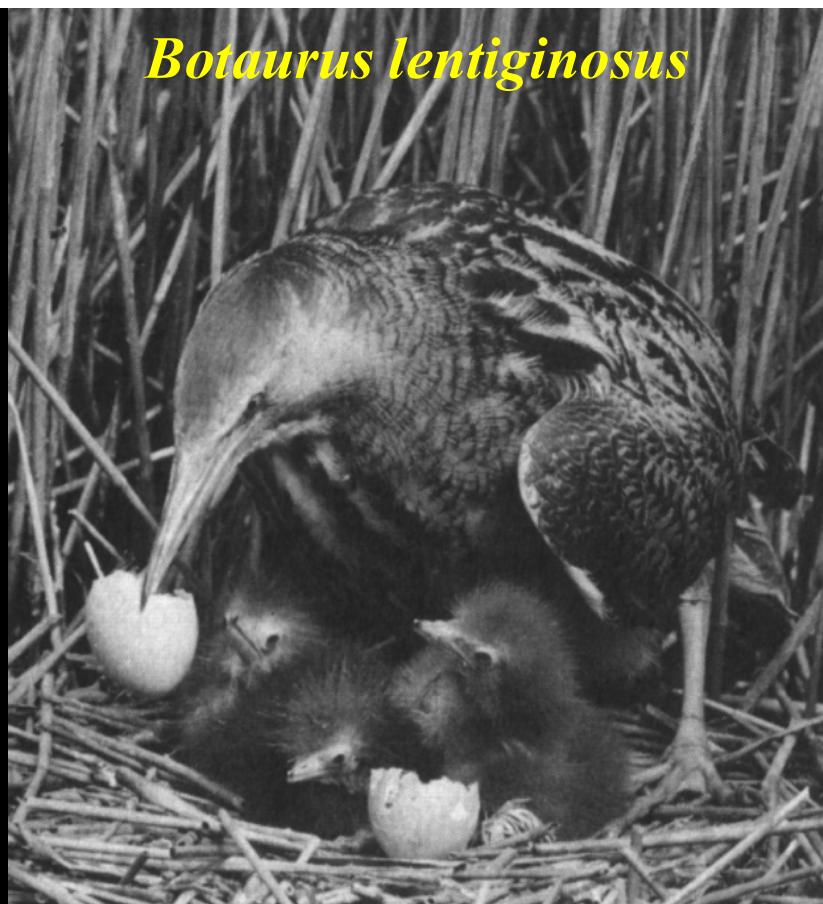


Crook J. H. (1964) The evolution of social organization and visual communication in the weaver bird (Ploceinae). *Behaviour Suppl.* **10:** 1 - 178

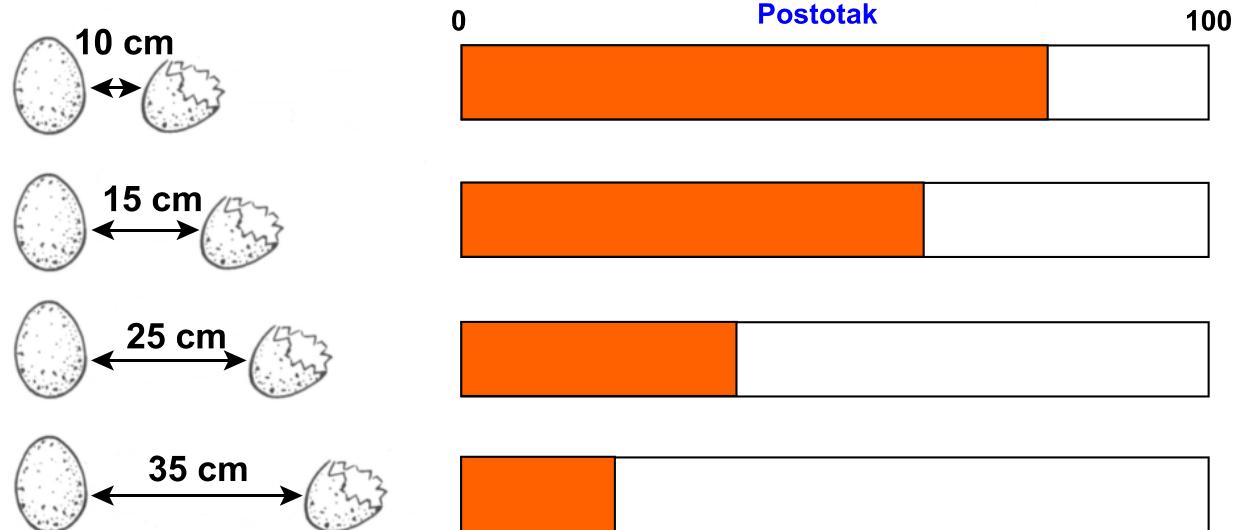
Larus ridibundus



Botaurus lentiginosus

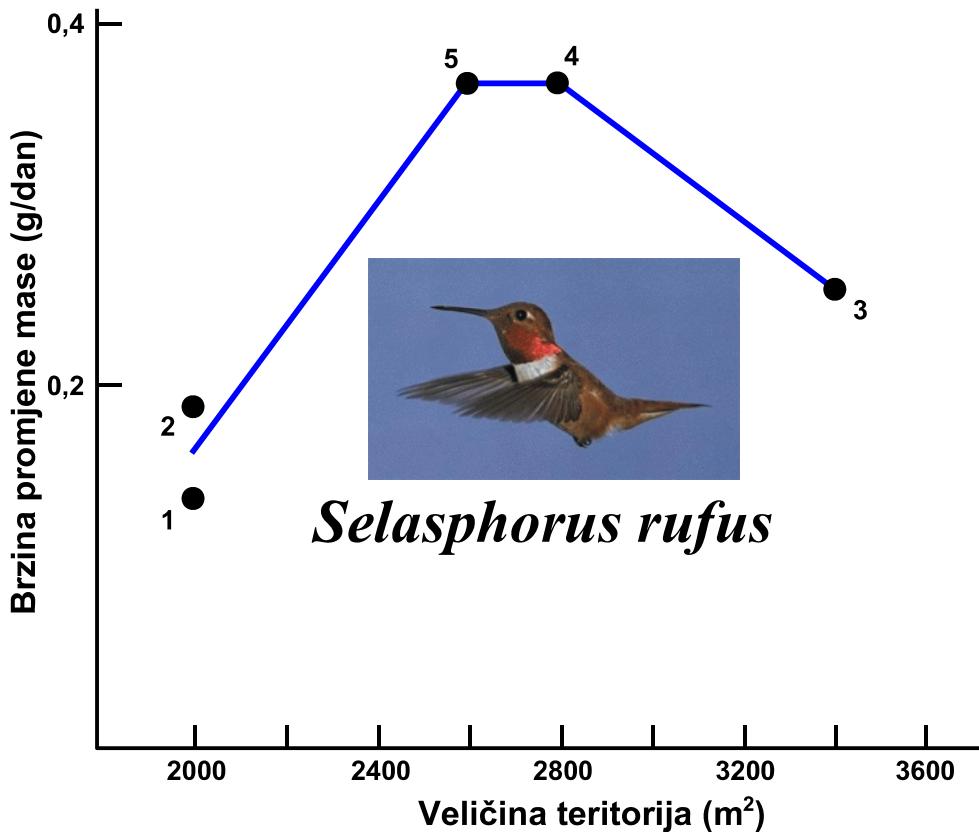


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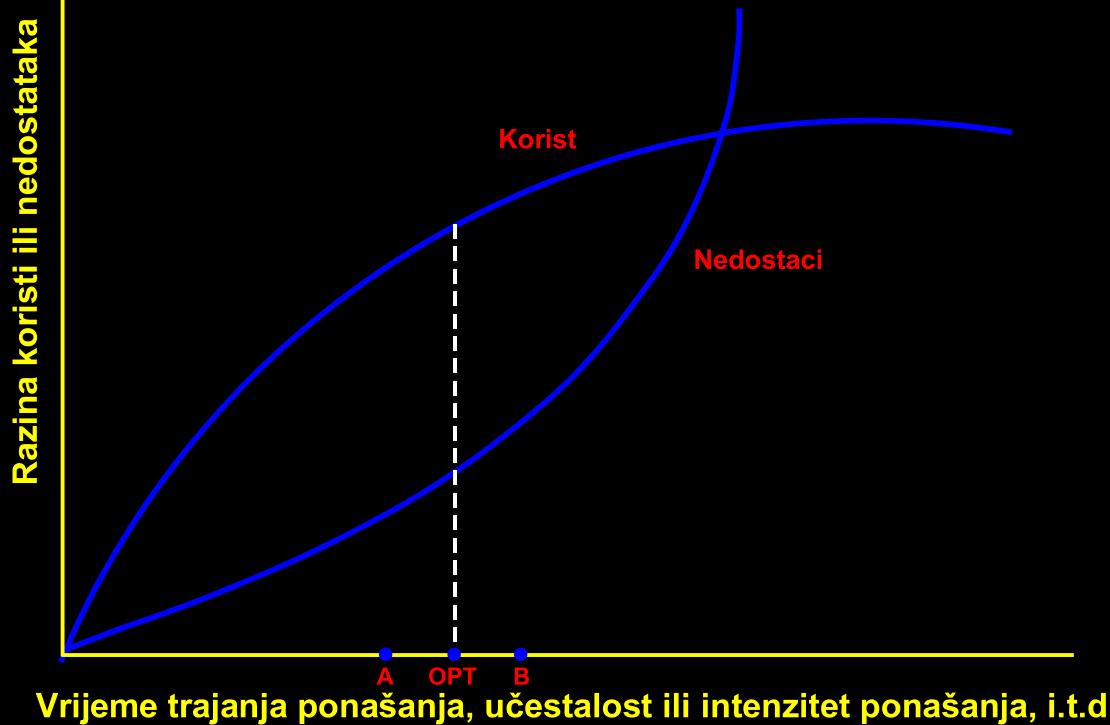
Tinbergen N., Broekhuysen G. J., Feekes F., Houghton J. C. W., Kruuk H., Szulc E. (1962) Egg - shell removal by the black -headed gull, *Larus ridibundus* L., a behaviour component of camouflage. *Behaviour* 19: 74 - 118

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Carpenter F. L., Paton D. C., Hixon M. A. (1983) Weight gain and adjustment of feeding territory size in migrant hummingbirds. *Proc. Natl. Acad. Sci USA* **80**: 7259 - 7263

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Evolucijski stabilne strategije (ESS) (engl. Evolutionary Stable Strategies)

Stabilne strategije koje ne mogu izbaciti nikakve invadirajuće strategije.

Mogu biti čiste (rijedje) ili miješane (češće).



Sphex ichneumoneus

