

Život u skupinama



Dascyllus aruanus



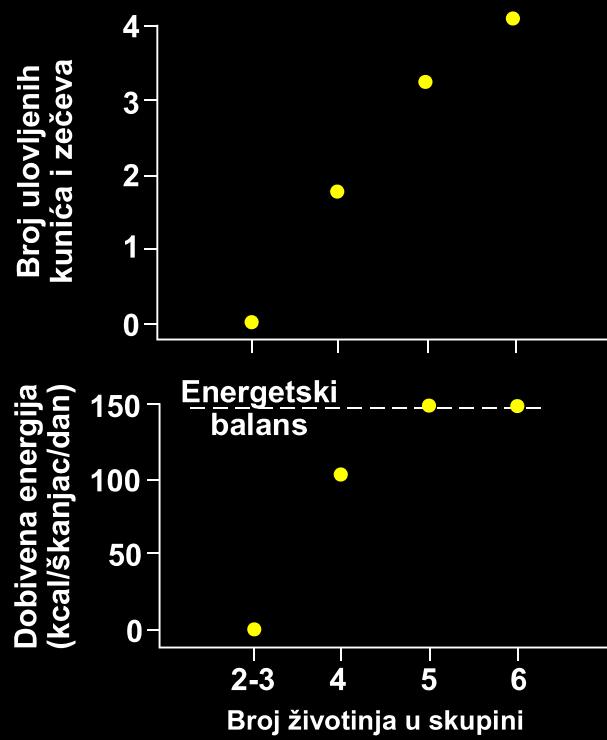
Tadarida brasiliensis mexicana

McCracken G.F. (1984) Communal nursing in Mexican free - tailed bat maternity colonies. *Science* 223: 1090 - 1091

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Parabuteo unicinctus



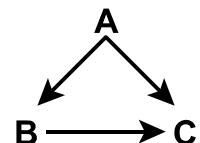
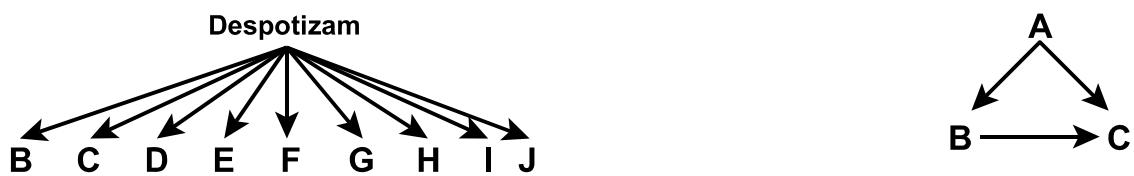
Bednarz J.C. (1988) Cooperative hunting in Harris's hawks (*Parabuteo unicinctus*). *Science* 239: 1525 - 1527

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Smanjenje konflikata u skupini postiže se:

- Stvaranjem dominacijskih hijerarhija
- Teritorijalnošću

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Linearna hijerarhija
A → B → C → D → E → F → G → H → I → J

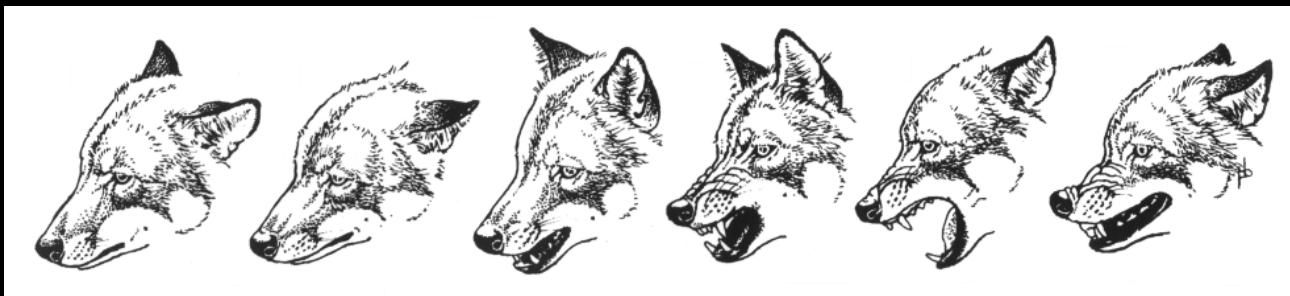
Dominacijske hijerarhije

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Canis lupus

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Normalni

Podređeni

Igranje

Vrlo agresivni

Vrlo defanzivni

Agresivno defanzivni

Canis lupus

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Sula nebouxii

Drummond H., Canales C. (1998) Dominance between booby nestlings involves winner and loser effects. *Anim. Behav.* **55**: 1669 - 1676

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Lycaon pictus

Creel S., Creel N.M., Mills M.G.L., Monfort S.L. (1997) Rank and reproduction in cooperatively breeding African wild dogs - Behavioral and endocrine correlates. *Behav. Ecol.* **8**: 298 - 306

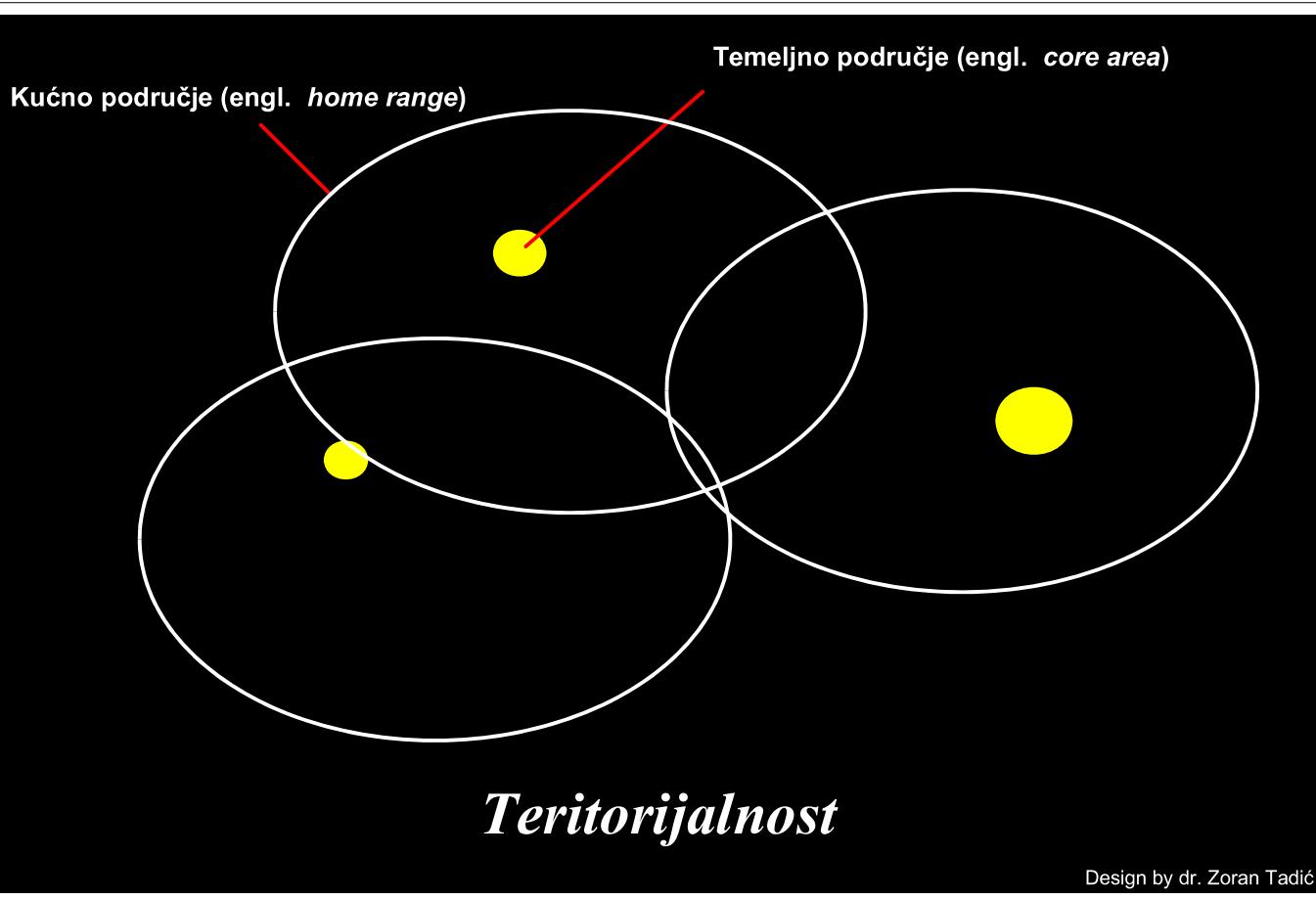
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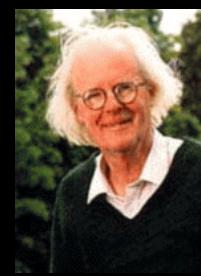
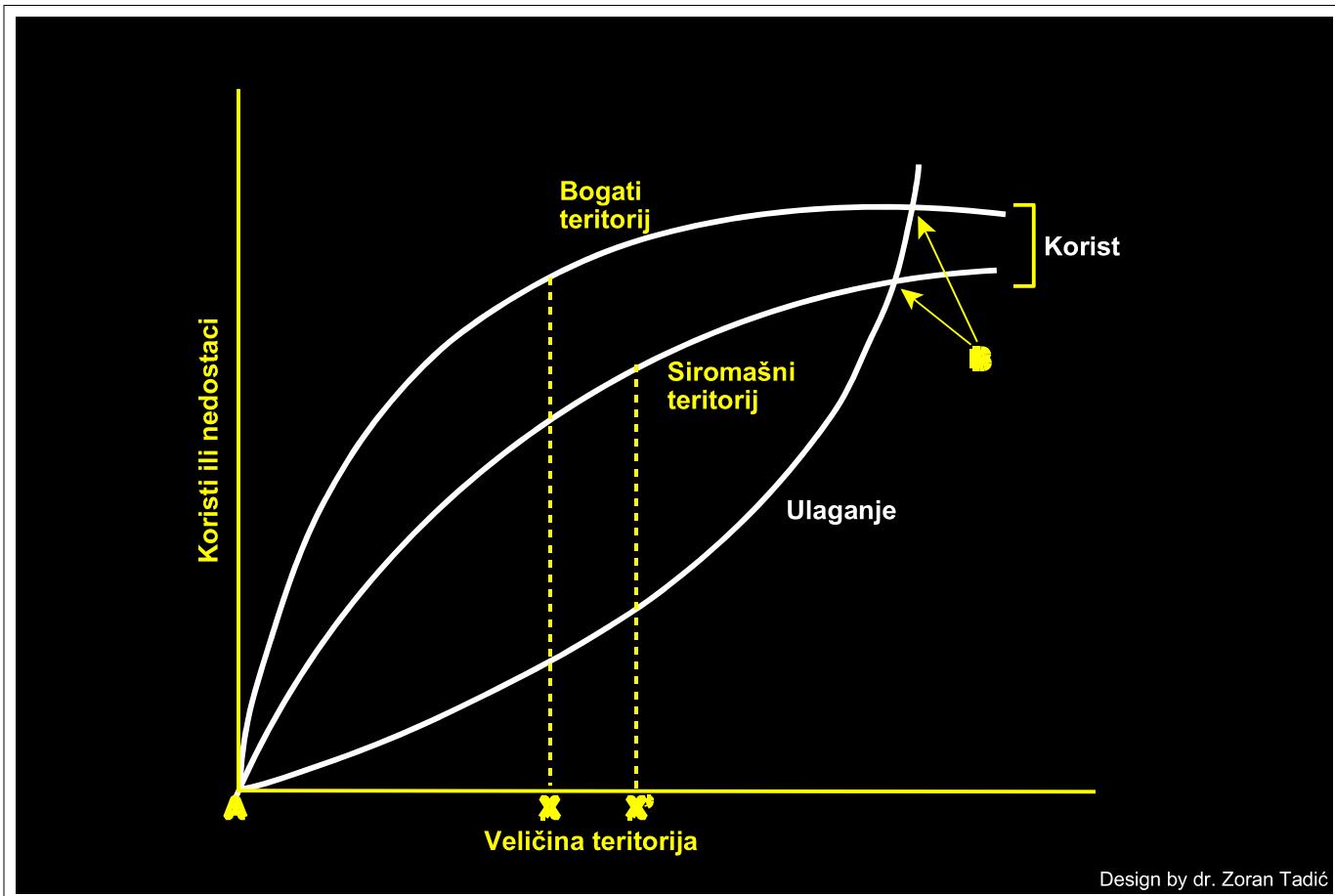
Hyaena brunnea

Owens D., Owens M. (1996) Social dominance and reproductive patterns in brown hyaenas. *Anim. Behav.* **51**: 535 - 551

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Teorija igara uzima u obzir:

John Maynard Smith
(1920 - 2004)

- Sve postojeće strategije
- Frekvenciju svake strategije u populaciji
- Gubitak ili dobitak fitness-a kod svake moguće kombinacije strategija

**Korist
koju
dobiva:**

Protivnik

Jastreb

Grlica

Jastreb

$$\frac{\text{vrijednost resursa} - \text{rizik od ozljede}}{2}$$

vrijednost resursa

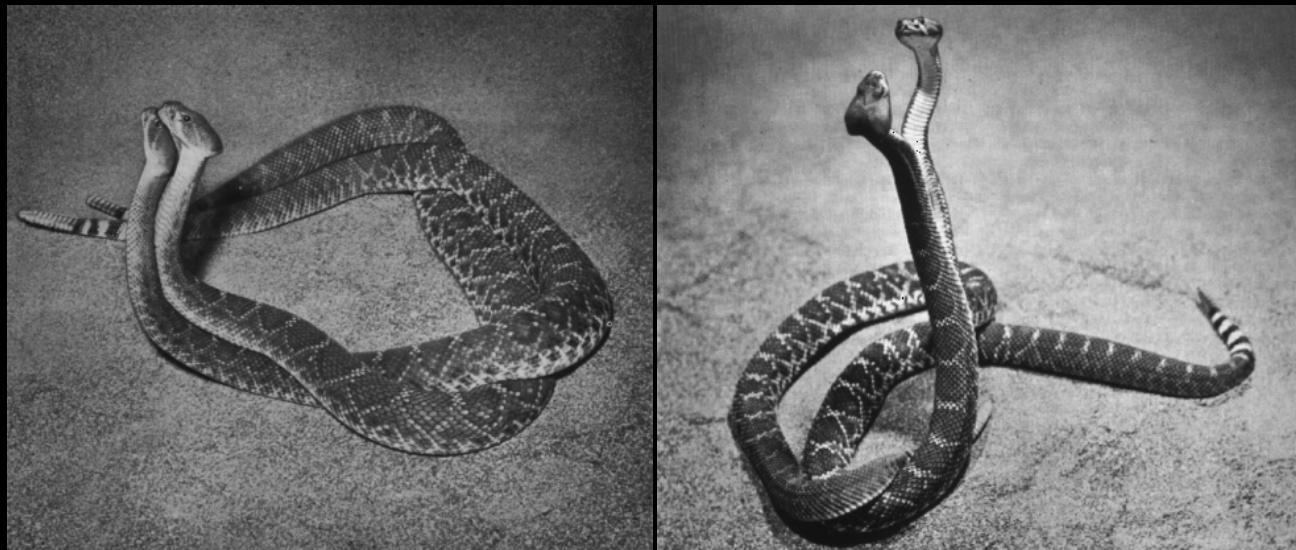
Grlica

0

$$\frac{\text{vrijednost resursa}}{2} - \text{cijena pokazivanja}$$

Maynard Smith J. (1974) The theory of games and the evolution of animal conflicts. *J. Theoret. Biol.* **47**: 209 - 221

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Crotalus ruber

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Rana catesbeiana

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Mirounga angustirostris

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Asimetrije između 2 protivnika:

- Asimetrije u mogućnosti obrane resursa
- Asimetrije u vrijednosti resursa
- Slučajne asimetrije

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