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al ONG CRISPUS SIBIU

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Foto: Luca Lapini

Golden jackal species monitoring

European Concerns RoJack project

Objectives

- Knowing the relation between golden jackal species, biodiversity and human activities
- Changes in ecosystems with golden jackal in the period 2011-2015
- Promotion of golden jackal

Luca Lapini MESSAGE

L. LAPINI et al., 2011. Italian jackals 1984-2011. An updated review (Canis aureus: Carnivora, Canidae)

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LUCA LAPINI, DANIELE CONTE, MARKO ZUPAN & LETIZIA KOZLAN

Italian jackals 1984-2011. An updated review

(*Canis aureus*: Carnivora, Canidae)

Synthesis of the Italian situation, already submitted to the review *Boll. Mus. Civ. St. nat. Venezia*, vol. 62 (2011).

Preface.

Canis aureus is a medium-sized wild dog widely distributed in Africa, Asia, in the Arabian Peninsula and in Central and South-Eastern Europe (JHALA & MOHELMAN, 2008).

The European golden jackal (*C. a. moreoticus*) is surely the largest subspecies of this taxon, since that the Egyptian form of this taxon (*C. a. lupaster*) is actually a little cryptic African wolf (FERGUSON, 1981; KNISPEN RUENESS et al., 2011).

The European distribution of this species has been noticeably modified in the last sixty years, due to the increase of its Croatian and Bulgarian populations and to the natural trend to long dispersal rates of the species (KRYŠTUFEK & TVRTKOVIC, 1990; KRYŠTUFEK et al., 1997; ARNOLD et al., 2011).

In the XX Century the first pulsation of its distribution-range in North Adriatic Hinterland dated back to the first years of 50's, when some packs of golden jackals arrived in North-Western and Central Slovenia (BRELIH, 1955).

A second bigger pulsation began in 80's and a third impressive expansion seems to have started at the beginning of the XXI Century (LAPINI et al., 2009; KRYŠTUFEK, 2011). The present situation is a consequence of the above-mentioned range pulsations, particularly due to the drastic reduction of the Balkan populations of wolves, culminated at the end of the first half of the XX Century (KRYŠTUFEK & TVRTKOVIC, 1990; KRYŠTUFEK et al., 1997).

The influences of the recent Climate Global Changes on this general picture are not clear yet, but might be negligible, because the main factors involved in the modification of the range of the species seem to be clearly anthropogenic.

Luca Lapini MESSAGE

•On the basis of our field experiences, however, the importance of the play-back method in the localization of scattered reproductive groups of golden jackals is surely over-rated, at least where they live at low population levels.

•On the contrary, it may be very useful in the monitoring of the relative density in areas where there are higher density populations of golden jackals, organized in several neighbouring territorial groups.

European concerns

Serbia

Until the late 1970s Golden Jackal (*Canis aureus* L., 1758) was a genuine rarity in our fauna. The rare single records from Serbia usually came from three areas: area of Negotin Krajina, southeastern Serbia and Srem. All three autochthonous micropopulations essentially remained undiscovered for a long time.

During the early 1980s, the population numbers of Golden Jackals in Serbia showed a pronounced increase, so by the end of last century this species had successfully recolonized one part of our country's territory. (Dusko Cirovic)

Hungary

Golden jackal is a native predator in Hungary, started its re-colonisation in the last decade of the 20th century. It seems, the main track of spreading northwards is River Tisza and its tributary streams. The resettled jackal is spreading extremely fast -like invasive species -due to its excellent adaptability. Increasing of the official hunting bag data shows the same. Its population can reach significant density (~13 sp/1000ha) in those habitat patches which are favourable for it. (Laszlo Szabo)

Greece

The situation in Greece was that population of jackals decreased in the period between '70s and '90s to low levels because, generally, of agriculture intensification and change of animal husbandry. However there is a comeback recently with an increase of populations in NE Greece and locally in Peloponnese and Samos island. However, small population clusters in other areas are still endangered. The difference of Greek from other Balkan or Central European jackal populations is the high degree of isolation due to the mountainous terrain, which made these small populations highly vulnerable to local agrosystem changes. (Giorgos Giannatos)

Slovenia

First observations of jackals in Slovenia were reported in 1952 (Brelj 1955). Several other individuals have been shot or observed since then, mostly along the border with Croatia and at Ljubljansko barje (Krofel 2008). On 25th November, 2005, jackal was shot near Gornji Grad in the Upper Savinja Valley, Northern Slovenia (980 m a.s.l.), in a mixed beech-spruce forest (Krofel & Potočnik 2008)

Romania

In 1929 the golden jackal was seen in a hunting session in the area of northern Danube, as vagrant. Since then it was mentioned sporadically only as vagrants in the "Mammals of Romania"

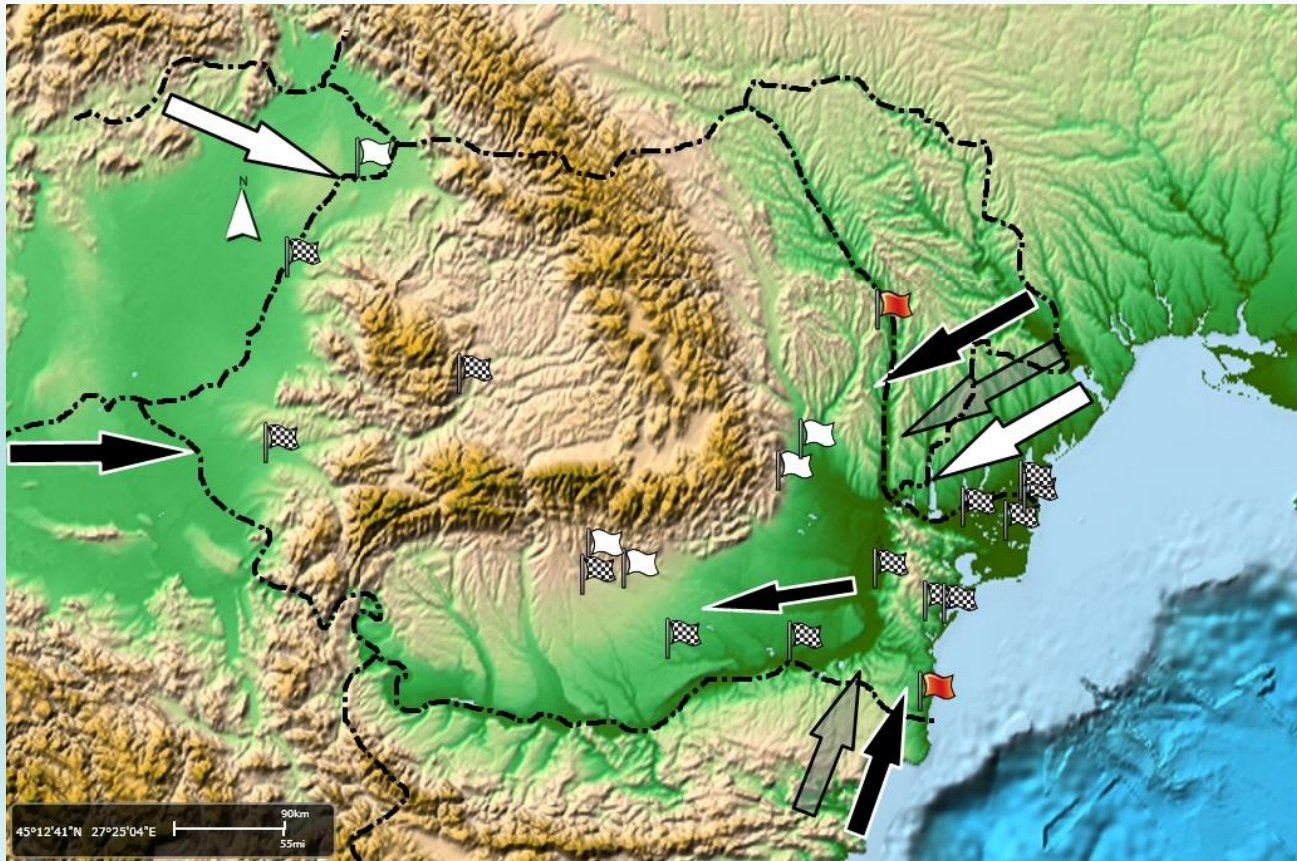
Since '80 its number increased, and now we know that in 2008, 1061 jackals were killed in different hunting sessions organized for other species. (Statistic Institute)

Publication on jackal studies in Romania (called "Sacalul auriu" written in 2004 by A. Angelescu, a Romanian forestry engineer), reflected valuable data about the biometry, ethology, anatomy, morphology of this mammal, based on the study of 68 individuals from Constanta and Tulcea counties (Eastern Part of Romania).

Dr Biol Murariu, from the National Museum of Natural History Gr Antipa from Bucharest collaborated with Prof Krystufek from Slovenia and Prof Kurtonuk from Turkey and published a paper in "Mammal Review" 1997, stating the northern limit of the species habitat on the left side of the Danube on Romanian territory. He is our scientific consultant for all our own golden jackal studies started at the beginning of 2010. (Ovidiu Banea & Petre Gargarea)

Biodiversity

Biodiversity is a measure of the health of ecosystems.



RoJack

Monitoringul ecosistemelor specifice sacalului auriu in arii naturale din Romania

Studiu de relatii interspecifice si de ecologie a populatiilor pe perioada 2011-2015

Scop:

Managementul durabil al ecosistemelor specifice sacalului auriu

(good management = 1^o we need a good and specialized monitoring)

RoJack

Obiective pentru 4-5 ani:

O1) Cunoasterea nivelului actual al populatiilor de sacal auriu in arii naturale din Romania

O2) Studii de componenta hranei si a relatiei sacal auriu unguitate

O3) Imbunatatirea imaginii sacalului auriu

O4) Implicarea organismelor specializate de stat si administrativ locale in managementul durabil al populatiilor de sacal auriu

RoJack

Activitatile principale:

A1) *12 actiuni de monitoring acustic* si spotlight 2-3 pe an timp de 4 ani (in 50 cal stations deja instalate)

A2) Utilizarea sistemelor informatice geografice GIS pentru analiza integrata a raspandirii sacalului auriu in functie de factorii biotici, abiotici si antropogeni din zonele de studiu, identificati in punctele de monitoring

A3) Analiza cotelor de recolta si a recoltelor de sacal auriu asa cum reiese din raportul anual al gestionarilor fondurilor cinegetice, acolo unde acest raport se intocmeste sistematic. Campanie de colectare de informatii din teren si de la organisme de stat specializate dar si local-administrative sau de la asociatiile de vanatori

A4) Observatii prin capcane foto (fototrapping cu 30 de camere foto si video) cu PIR si infrarosu ce vor fi instalate permanent; informatiile se vor colecta si analiza cu o periodicitate de maxim 3 luni

RoJack

A5) Organizarea unor stagii de lucru in zone unde s-au desfasurat proiecte de monitoring specializat pentru sacalul auriu (parcuri nationale sau arii naturale din strainatate unde s-au realizat studii de habitat specific prin acolarare de indivizi) Perfectionare prin participare la simpozioane si conferinte internationale specifice sacalului auriu.

A6) Acolarare de indivizi de sacal auriu pentru analiza comportamentului de hrana si de dimensiuni de biotop specific

A7) Recoltare de material biologic si cercetare de laborator, analize de continut gastric, genetice pentru determinarea de interconexiuni intre grupuri, populatii si nuclee

RoJack

A8) Activitati de educatie ecologica in scoli, universitati, administratii locale. Publicarea de materiale si brosure informative. Publicarea de volume cu informatii despre biologia sacalului si a relatiilor interspecifice pe care acesta le dezvolta in arii naturale din Romania

A9) Stabilirea de politici de management continuu al populatiilor de sacal auriu prin implicarea administratiilor fondurilor cinegetice, a autoritatii de mediu si a institutelor de biologie. Alcatuirea Conservation Action Plan la specia de sacal auriu in Romania in baza datelor obtinute din prelucrarea cu sisteme informatice geografice GIS

Realizarea cotelor de recolta la specia de sacal auriu pe fonduri de vanatoare gestionate de catre DS Timis, DS Dolj, DS Giurgiu, DS Calarasi

	2005/2006	2006/2007	2007/2008	2008/2009	2009/2010	2010/2011	
TIMIS(Cheveresu)			0	0	0	9	
DOLJ				81	70	84	93
GIURGIU			11	17	23	27	22
CALARASI	6		0	24	13	52	5

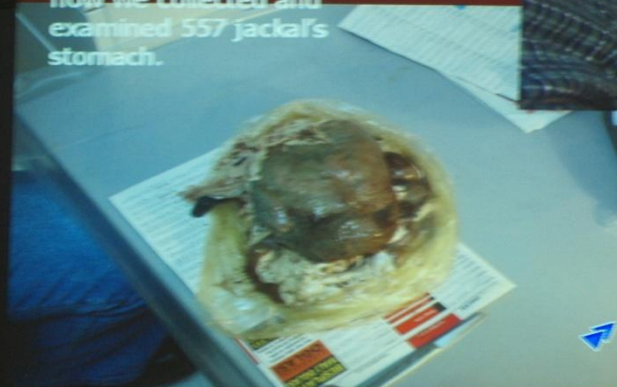
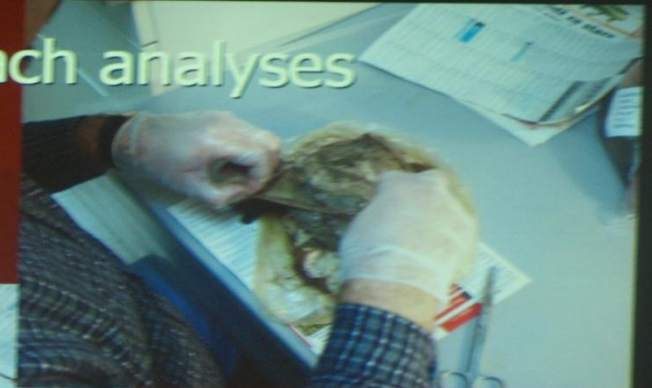


Foto: Ovidiu Banea

Foto: Dusko Cirovic

Stomach analyses

In opposite of many recent European studies, the composition of diet of Golden Jackal in Serbia was determined by method of stomach content analysis. Till now we collected and examined 557 jackal's stomach.



Recent, we finished winter diet, and analyses of jackal feeding during of vegetation period is under process.



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>98% corn (*Zea mays*)