Accipitriformes: Cuculiformia: Cuculidae, Centropodidae; Accipitriformia: Accipitridae (incl. Pandionidae), Sagittariidae; Phasianiformia: Phasianidae (incl. Tetraonidae, Numididae, Meleagrididae, Rhegminornithidae), Cracidae (incl. Gallinuloididae), Megapodiidae

Strigiformes: Strigiformia: Strigidae (incl. Tytonidae, Protostrigidae), Leptosomatidae, Steatornithidae; Caprimulgiformia: Archaeotrogonidae, Caprimulgidae (incl. Nyctibiidae), Podargidae Oincl. Aegothelidae), Musophagidae (incl. Couidae, Apopempsidae); Falconiformia: Falconidae

Columbiformes: Meropiformia: Halcyonidae, Todidae, Momotidae, Meropidae, Trogonidae; Columbiformia: Columbidae

Trochiliformes: Coraciiformia: Primobucconidae, Bucconidae, Galbulidae, Coraciidae (incl. Brachypteraciidae); Trochiliformia: Apodidae, Trochilidae

Tyranniformes: Tyranniformia: Tyrannidae (incl. Oxynuncidae), Querulidae (incl. Phytotomidae), Pipridae; Furnariiformia: Thamnophilidae (incl. Conopophagidae), Scytalopodidae, Furnariidae, Dendrocolaptidae

Passeriformes: many families with less known relationships

Ciconiida: (new subclass for the 2nd branch of the Cenozoic radiation; type: Ciconia Brisson 1760):

Apterygiformes: Procellariiformia: Procellariidae (incl. Diomedeidae, Hydrobatidae, Pelecanoididae), Spheniscidae; Apterygiformia: Dinornithidae (incl. Anomalopterygidae), Apterygidae; Tinamiformia: Tinamidae; Podicipediformia: Podicipedidae; Dromadiformia: Dromadidae; Chioniformia: Chionididae

Ciconiiformes: Ciconiiformia: Ciconiidae (incl. Balaenicipitidae), Pelecanidae (incl. ?Cyphornithidae), Fregatidae, Scopidae; Odontopterygiformia: Odontopterygidae (incl. Pseudodontornithidae); Vulturiformia: Vulturidae (incl. Neocathartidae, Teratornithidae); Charadriiformia: Charadriidae, Glareolidae, Pterocletidae, Laridae

Anseriformes: Phoenicopteriformia: Presbyornithidae (incl. Telmabatidae), Phoenicopteridae (incl. ?Agnopteridae, ?Scaniornithidae, Palaeolodidae), Recurvirostridae, Haematopodidae, Burhinidae; Anseriformia: Anseridae (incl. Paranyrocidae), Anhimidae; Otidiformia: Otididae (incl. Gryzajidae); Jacaniformia: Jacanidae, Rostratulidae; Gruiformia: Gruidae (incl. Eogruidae, Ergilornithidae)

Plataleiformes: Plataleidae, Scolopacidae (incl. Phalaropodidae)

Piciformes: Pteroglossidae, Capitornidae, Indicatoridae, Picidae

Aves inc. sedis: Aegialornithidae (incl. Hemiprocnidae), Cladornithidae, Dakatornithidae, Halcyornithidae, Marinavidae, Primoscenidae, Thinocoridae, Zygodactylidae

Passerida inc. sedis: Acanthisittidae, Pittidae

Ciconiida inc. sedis: Coliidae, Psittacidae

not avian: Bradycnemidae, Caenagnathidae, Gobipterygidae.

ENCEPHALIZATION OF BIRDS

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The study of the brain weight (E) to body weight (S) relationship in different taxa is a basic prereguisite to the investigation of brain size evolution.

In this study encephalization of 409 non-passeriform and 9 passeriform species was estimated by measuring volume of their cavita cranii. Additional data on 139 non-passeriform and 107 passeriform species were compiled from literature resulting in a knowledge of encephalization of 438 (=11.6%) non-passeriform and 109 (=2.7%) passeriform species. For each species, brain size of 1-127 individuals has been measured.

The results are presented in the form of allometric equations; correlation was tested with Kendall's tau. All correlations are significant at $p = 0.01$.

Aves: $\log E = \log 0.1528 + 0.5389 \pm 0.0414 \log S$
tau = 0.6947, n = 547

Non-Passeriformes: $\log E = \log 0.1529 + 0.5369 \pm 0.0453 \log S$
tau = 0.7059, n = 438

Passeriformes: $\log E = \log 0.0865 + 0.7257 \pm 0.0066 \log S$
tau = 0.9086, n = 109

MORTALITY OF BIRDS ON THE ROADS AND THEIR DENSITY

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It is easy to see on the roads, a relation between the increasing traffic and a larger number of bird corpses, dead on impact with the passing **cars**. Although the collision between birds and cars happens casually, however it is the number of dead birds that is directly proportional to: a) the local density of birds; b) the frequency of passing cars, in relation to the importance of that particular arterial road; c) the model of the straight and flat road, where the speed of the cars is greater; d) the different seasons. Contrary, the number of dead is inversely proportional to the mountain roads, full of bends, where the slower speed reduces the probability of impact. Naturally the number of deaths differs according to the specimens and their ethology, and it's higher for the Passeriformes, that like feeding on the road borders and in the adjacent grounds, especially in winter-time.

This technique has been applied in Sardinia for different models of road (straight, tortuous, etc.); on different altimetry (plain, hill, mountain, etc.); across some different types of botanical associations (cultivations, wood, forest, etc.); and during all the seasons of year. From this study we obtained an approximate idea of density of various bird specimens, in different habitats, during the year.

This method of relative census brings us again to the technique "Breeding Bird Survey", since it is remarked the number of impacts between cars and birds, rather than the visual meeting between the observer and birds.

FRUIT SELECTION BY TROPICAL FRUGIVOROUS BIRDS

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Fruit choice experiments were conducted with captive individuals of several species of small frugivores at the La Selva Biological Station in