



Special Issue on Dogs – Introduction

Luis Pacheco-Cobos¹ · Bruce Winterhalder²

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Among the relationships that we sustain with animal domesticates, our bond with dogs is likely the most ancient and surely the most versatile. Scientific evidence traces this relation back to sometime in the Upper Palaeolithic (c. 50 to 12 kya); the articles in this special issue offer ample evidence of the diversity of canid-human interactions worldwide. The subject likewise pleads for multi-disciplinary collaboration. Contributors represented here rely upon archaeological, ecological, historic, ethnographic, zoological, and biochemical data to assess their research questions. Readers will find theoretical and empirical approaches designed to clarify how the canid-human relationship co-evolved in different spaces and times.

The list of specific interactions that humans have sustained with canines is lengthy. Which of those were decisive in the evolution of dog domestication remains somewhat blurry, a yet enigmatic part of our and their history. Two contributions in this issue hypothesize about the domestication of dogs from wolves, drawing on archaeological and ethnohistoric evidence from Eurasia (Germonpré)^{*} and from a synthetic view of dingo-human relationships in Australia (Koungoulos)^{*}. Human selection on behavior via reproductive management of dogs (Fig. 1A) could have been an important step early in the domestication process.

Once domestication had initiated, our ancestors profited from canines' social instincts, sensory faculties, hunting skills, and strength, which has been hypothesized to be an important determinant of the mobility of human populations in the past, haulage affecting subsistence, settlement

relocation, and the migratory mobility of human communities. Three contributions in this issue analyze evidence for canine transport. A cross-cultural analysis (Lupo)^{*} shows that dogs improve human transport capacity and she explores the circumstances under which canid haulage influenced the spread of modern humans into new environments. Evidence from North America (Welker)^{*} indicates that dogs' assistance with the carrying of human belongings could have reduced the risk of resource shortfalls, mitigating environmental unpredictability. Despite having osteological markers suggesting that hauling took place, the evidence from British Columbia (Prentiss)^{*} does not support the idea that dogs transported salmon from fishing sites. Rather, five other possible roles (e.g., consumers of food waste, hunting aids, sources of products, material wealth, and ritual item) reflect how ecological and social contexts can structure the varied functions that dogs perform in human societies.

In societies dependent on pastoralism and agriculture, dog-human interactions not only persist but also encompass broader elements of human daily life. Facing rapid changes in ecology and society, dogs in pre-contact New Zealand (Greig)^{*} switched from being a source of food to other roles reflecting a wider range of relationships with people. Human settlement and megafaunal extinctions are discussed under this light. In Siberia (Oehler)^{*}, canids collaborate with pastoralists to herd livestock, are allowed to choose who they join to hunt, and take on important roles in the local cosmology. Maya farmers in Belize (Pacheco-Cobos)^{*} recognize that their dogs protect field crops from herbivore assaults, aid in the hunt for wild meat, and guard homesteads and the food and other belongings stored there. The demography of the community dog population and the costs of maintaining Belizean dogs are analyzed from a cultural ecology perspective that also is applied in Nicaragua (Eisenman)^{*}. Mayangna communities living in a Biosphere Reserve own dogs that are associated with a variety of syndromes: decreased body condition score and hypoalbuminemia; lymphocytosis and eosinophilia; segmented neutrophilia; and lymphadenopathy, tick infestation and hyperglobulinemia. Household wealth only weakly predicts dogs' health and potential zoonotic diseases

✉ Luis Pacheco-Cobos
luipacheco@uv.mx

Bruce Winterhalder
bwinterhalder@ucdavis.edu

¹ Facultad de Biología & Cuerpo Académico Biología Y Ecología del Comportamiento, Universidad Veracruzana, Cto. Aguirre Beltrán s/n Zona Universitaria, Xalapa, Veracruz 91090, Mexico

² Department of Anthropology & Graduate Group in Ecology, University of California Davis, 1 Shields Ave, Davis, CA 95616, USA

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*Citations with an asterisk appear in this issue

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