

# FROM OAKS TO PALMS: EURASIAN JAYS *Garrulus glandarius* TAKE WASHINGTONIA LEAF AND CORTICAL FIBERS FOR NEST BUILDING

PAOLO GIAMPAOLETTI <sup>(1)</sup> & CORRADO BATTISTI <sup>(1,2)</sup>

<sup>(1)</sup> Stazione Romana Osservazione e Protezione Uccelli, via Paola Falconieri, 13, 00152 Rome, Italy  
([pgiampaoletti@yahoo.it](mailto:pgiampaoletti@yahoo.it))

<sup>(2)</sup> “Torre Flavia” LTER (Long Term Ecological Research) Station, Città Metropolitana di Roma Capitale, Servizio Aree Protette, Via G. Ribotta, 41, 00144 Rome, Italy (c.battisti@cittametropolitanaroma.it)

**Riassunto – Dalle querce alle palme: Ghiandaie (*Garrulus glandarius*) prelevano fibre foliari e corticali di palme *Washingtonia* per la costruzione del nido.** Questo comportamento, osservato per la prima volta in un grande parco storico romano (Villa Doria Pamphili), sottolinea l'elevato opportunismo della specie ed è conseguenza di due fattori concomitanti: espansione del corvide in ambito urbano e contestuale presenza di piante ornamentali non native.

On 20 April 2024 in the Villa Doria Pamphili (the largest historical urban park in Rome; 184 hectares; central Italy), near Palazzina Algardi (viale Fontana di Venere; 41°53'13.6"N; 12°27'00.4"E), we observed three individuals of Eurasian Jays (*Garrulus glandarius*) perched on a large Lebanon Cedar (*Cedrus libani*). Among them, two moved towards a nearby (approx. 10 m) dead palm tree (*Washingtonia robusta* vel. *filifera*; diameter at breast height: 40 cm; tree height: 9 m) and, alighting along the trunk, took leaf and cortical fibers everted, at approx. 1 m tall, probably for nest construction (Fig. 1). The birds were very confident, even in the presence of people (escape flight distance: approx. <10 m).

Eurasian Jay is a corvid linked to hilly and mountainous agroforestry environments (Bianconi *et al.*, 2003; Bani *et al.*, 2006; Sanesi *et al.*, 2009; Fraissinet *et al.*, 2023; for Latium: Brunelli *et al.*, 2011). The expansion of the species in urban and sub-urban habitats is a recent phenomenon in central Italy: specifically, in Rome, until a few decades ago, it was extremely localized as a breeding species (Cignini & Zapparoli, 1996), limited to remnant forest fragments of the Roman countryside (Castaldi & Guerrieri, 2005; Battisti, 2014), and absent in Villa Pamphili urban park at least until 2012 (Battisti, 1986; Battisti & Dodaro, 2016). In the last years, the presence of Eurasian Jay during the reproductive period in historic parks and peri-urban woods has recently been verified (Battisti & Mandolini, 2018; Villa Doria Pamphili, first record: 23, May, 2013; P. Giampaoletti, Ornitho.it).

*Washingtonia* palms are trees native to Mexico and the southwestern United States, actively cultivated for ornamental purposes in various Mediterranean contexts, including urban parks (Heywood, 2017). In Rome these palms are very widespread in historic parks and residential contexts (Cignini, 2015; Garzia *et al.*, 2019).

This event further underlines the behavioral opportunism of corvids in exploring

new resources that become available (Benmazouz *et al.*, 2021) and could only manifest itself in the presence of two co-occurring circumstances (expansion of the Eurasian Jay in urban areas and cultivation of an ornamental species in historic parks). Moreover, the availability of a large number of resources, also not directly linked to feeding (as, in our case, non native tree species providing fibers for nests) may explain, at least partially, the expansion of Eurasian Jay in urban environments.



**Figure 1.** Eurasian Jay (in white circle) with fibers in the beak (left). On the right: leaf and cortical fibers (different details) on the *Washingtonia* dead tree.

## REFERENCES

- Bani L., Massimino D., Bottoni L. & Massa R., 2006. A multi-scale method for selecting indicator species and priority conservation areas: a case study for broadleaved forests in Lombardy, Italy. *Conservation Biology*, 20(2): 512-526.
- Battisti C., 1986. Censimento degli uccelli nidificanti in un parco urbano (Villa Doria Pamphili, Roma). *Avocetta*, 10: 37–40.
- Battisti C., 2014. Check-list of Vertebrates in the “Tenuta dei Massimi” nature reserve (Rome, central Italy) with some remarks on local conservation priorities. *Natural History Sciences, Atti della Società italiana di Scienze Naturali e del Museo Civico di Storia Naturale in Milano*, 1 (1): 23-36.
- Battisti C. & Dodaro G., 2016. Mapping bird assemblages in a Mediterranean urban park: Evidence for a shift in dominance towards medium-large body sized species after 26 years. *Belgian Journal of Zoology*, 146(2): 81-89.
- Battisti C. & Mandolini R., 2018. La comunità ornitica nidificante in un settore residuale della Campagna romana (corridoio tra le Riserve naturali ‘Valle dei Casali’ e ‘Tenuta dei Massimi’; Roma, Italia centrale). *Alula*, 25(1-2): 1-9.
- Benmazouz I., Jokimäki J., Lengyel S., Juhász L., Kaisanlahti-Jokimäki M.-L., Kardos G., Paládi P. & Kövér L., 2021. Corvids in urban environments: a systematic global literature review. *Animals*, 11: 3226.
- Bianconi R., Battisti C. & Zapparoli M., 2003. Pattern of richness, abundance and diversity of four interior bird species in a hilly landscape in Central Italy: a contribution to assess their sensitivity to

habitat fragmentation. *Journal of Mediterranean Ecology*, 4: 37-44.

- Brunelli M., Sarrocco S., Corbi F., Sorace A., Boano A., De Felici S., Guerrieri G., Meschini A. & Roma S. (Eds.), 2011. *Nuovo Atlante degli Uccelli Nidificanti nel Lazio*. Edizioni ARP (Agenzia Regionale Parchi), Roma.
- Castaldi A. & Guerrieri G. (2005). Urbanizzazioni e diffusione di specie boschive in paesaggi frammentati del litorale romano (Ostia Lido-Roma). *Alula*, 12(1-2): 73-84.
- Cignini B., 2015. *Le ville e i giardini di Roma*. Palombi editore, Roma.
- Cignini B. & Zapparoli M. (red.), 1996. *Atlante degli uccelli nidificanti a Roma*. Fratelli Palombi Editori, Roma.
- Fraissinet M., Ancillotto L., Migliozzi A., Capasso S., Bosso L., Chamberlain D.E. & Russo D., 2023. Responses of avian assemblages to spatiotemporal landscape dynamics in urban ecosystems. *Landscape Ecology*, 38(1): 293-305.
- Garzia M., Iacobelli L., Scalici M., Fanelli G., D'Angeli A., Gregori G., Guidobaldi G., Marengo L. & Battisti C., 2019. Aliens come from the edge: a distribution pattern of focal alien plants in a small coastal reserve. *Quaderni del Museo Civico di Storia Naturale di Ferrara*, 7: 113-119.
- Heywood V.H., 2017. The nature and composition of urban plant diversity in the Mediterranean. *Flora Mediterranea*, 27: 195-220.
- Sanesi G., Padoa-Schioppa E., Lorusso L., Bottoni L. & Laforteza R., 2009. Avian ecological diversity as an indicator of urban forest functionality. Results from two case studies in Northern and southern Italy. *Journal of Arboriculture*, 35(2): 80-86.