

Early laying of kentish plover *Charadrius alexandrinus* along the seacoast of Senigallia (Central Italy)

NIKI MORGANTI^{1*}, MAURO MENCARELLI¹, FRANCESCA MORICI¹, CLAUDIO SEBASTIANELLI²

¹Studio Naturalistico Diatomea - Via XXVIII Settembre 28B, 60019 Senigallia (AN), Italy

²ARCA - Viale Bonopera 55, 60019 Senigallia (AN), Italy

*corresponding author: Niki Morganti (niki.morganti81@gmail.com)

Abstract – In Italy the kentish plover generally nests from April to May, with cases of egg laying also in March. In the breeding season 2011, during the survey of the nesting population of Senigallia (Marche) we observed a nest on 18th February. According to bibliographical and unpublished data, this seems to be the earliest date of egg laying in Italy and probably in Europe.

Key-words: kentish plover, early laying, Italy.

In Italy the kentish plover *Charadrius alexandrinus* is a migratory species which breeds along coasts, and it is partially sedentary in Central and South of Italy. The Italian population of Kentish Plover is estimated in 1,300-2,000 pairs, but a very strong decline has been verified in some specific areas (Brichetti & Fracasso 2004). In Marche region (Central Italy) it is considered as a breeding, migratory and irregular wintering species (Giacchini 2003, 2007). Actually the kentish plover is resident all year around only along the seacoasts of Senigallia and Fermo, where the largest number of pairs breeds (Fusari *et al.* 2011, Morganti *et al.* 2009).

In particular, in Senigallia it breeds in three different areas: Cesano, Cesanella and Marzocca, that are characterized by the presence of sparse psammophilous vegetation, materials drift to the beach by sea storms and ditches and remittances of boats (Morganti *et al.* 2009).

According to Cramp & Simmons (1983) the kentish plover nests in Italy from April to June, with cases in late March. Along the seacoast of Senigallia, earliest nests are usually observed in the second half of March, but in 2011 we have recorded an attempt of nest outside the normal breeding season. In the period between the 5th and 15th February 2011 there was a substantial increase in temperatures due to a vast and rugged dome anticyclone which af-

ected central Europe (Tognetti 2011). In the same period we observed a pair with breeding character in Cesanella (Senigallia) and on 18th February we observed a nest with two eggs in the same site. An abrupt change in weather conditions with the presence of northern cold winds of up to 50 km/h and a considerable drop in temperature has followed this period of hot off-season. During the daily monitoring we did not detect neither male nor female on their eggs, so we supposed that the nest had been abandoned. On 21st February, however, the laying of the third egg was detected, with a considerable increase in the time of hatching by the female, while the male was never observed on the eggs. On 2nd March the eggs were gone, but we were unable to find out the cause because more than 100 mm of rain dropped in the first two days of March (Tognetti & Busilacchi 2011) and this led to the cancellation of all traces around the nest.

The possible causes could be: predation by the hooded crow *Corvus cornix*, which is the main predator of eggs and chicks in this area (Morici *et al.* 2011); people or dogs trample; the series of storms during the raining days. This appears to be the earliest laying date in Italy, as evidenced in the Table 1.

In Europe only two cases of early nesting of kentish plover were documented, both in Spain: Juan Amat (pers. obs.) observed a male with chicks in March at Fuente de Piedra lake and, given the size of chicks, estimated that the egg laying occurred in February; Alejandro Pérez-Hurtado (pers. obs.) also observed adults with chicks in March at Cadiz Bay and, given chicks' age, he estimated that egg laying probably took place in February.

During the next years we will evaluate if this earliest laying date is exceptional, like in Spain, or it is an usual breeding event.

Table 1. Laying dates of the kentish plover in Italy. Regions: administrative areas of Italy where it breeds. Dates: first date of laying observed. Sites: areas where nests were detected. References: sources of data.

Regions	Dates	Sites	References
Apulia	13 th March	seacoast of Mola di Bari	Liuzzi <i>pers. obs.</i>
Abruzzi	5 th March	seacoast of Tortoreto (Teramo)	De Sanctis <i>pers. obs.</i>
Basilicata	13 th March	Mouth of the Cavone river (Matera)	Fulco <i>pers. obs.</i>
Calabria	10 th April	seacoast of Reggio Calabria	Scuderi <i>pers. obs.</i>
Campania	25 th March	seacoast of province of Salerno	Mancuso <i>et al.</i> 2011
Emilia Romagna	26 th March	seacoast of Lido degli Estensi (Ferrara)	Farioli <i>pers. obs.</i>
Friuli Venezia Giulia	5 th April	seacoast of Monfalcone (Gorizia)	Utmar <i>pers. obs.</i>
Latium	10 th March	Mouth of Incastro stream (Roma)	Pietrelli <i>pers. obs.</i>
Marche	18 th February	seacoast of Senigallia (Ancona)	Morganti <i>pers. obs.</i>
Molise	8 th April	seacoast of Campomarino (Campobasso)	Carafa & De Lisio <i>pers. obs.</i>
Sardinia	16 th March	SE coast	Mascia & Grussu 2011
Sicily	1 st March	Priolo salt pans (Siracusa)	Corso & Ientile <i>pers. obs.</i>
Tuscany	20 th March	seacoast of province of Grosseto	Giovacchini <i>et al.</i> 2011
Veneto	16 th March	seacoast of Venice	Scarton <i>et al.</i> 2004

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REFERENCES

- Brichetti P. & Fracasso G., 2004. Ornitologia Italiana. Vol. 2. Tetrionidae-Scolopacidae. Alberto Perdisa Editore, Bologna.
- Cramp S. & Simmons K.E.L., 1983. The Birds of the Western Palearctic. Vol. III. Oxford University Press, Oxford.
- Fusari M., Marini G., Mencarelli M., Morganti N., Morici F. & Pascucci M., 2011. Status, distribuzione e conservazione del Fratino (*Charadrius alexandrinus*) nelle Marche. In: Biondi M. & Pietrelli L. (eds), Il Fratino: status, biologia e conservazione di una specie minacciata. Atti del Convegno Nazionale. Edizioni Belvedere (LT), Le Scienze (13): 89-94.
- Giacchini P., 2007. Atlante degli uccelli nidificanti nella provincia di Ancona. Provincia di Ancona, IX Settore Tutela dell'Ambiente - Area Flora e Fauna. Ancona, 352 pp.
- Giacchini P., 2003. Check-list degli Uccelli delle Marche. Riv. ital. Orn. 73 (1): 25-45.
- Giovacchini P., Melini D. & Stefanini P., 2011. Il Fratino (*Charadrius alexandrinus*) nidificante in provincia di Grosseto (2008-2009): stato attuale della popolazione e analisi della distribuzione. In: Biondi M. & Pietrelli L. (eds), Il Fratino: status, biologia e conservazione di una specie minacciata. Atti del Convegno Nazionale. Edizioni Belvedere (LT), Le Scienze (13): 95-104.
- Mancuso C., Ceruso A. & Quarello G., 2011. Status del Fratino (*Charadrius alexandrinus*) sul litorale salernitano. In: Biondi M. & Pietrelli L. (eds), Il Fratino: status, biologia e conservazione di una specie minacciata. Atti del Convegno Nazionale. Edizioni Belvedere (LT), Le Scienze (13): 111-114.
- Mascia F. & Grussu M., 2011. Primi dati sulla biologia riproduttiva del Fratino (*Charadrius alexandrinus*) in Sardegna. In: Biondi M. & Pietrelli L. (eds), Il Fratino: status, biologia e conservazione di una specie minacciata. Atti del Convegno Nazionale. Edizioni Belvedere (LT), Le Scienze (13): 121-124.
- Morganti N., Fusari M., Mencarelli M., Morici F., Pascucci M. & Marini G., 2009. Aspetti ecologici della nidificazione di *Charadrius alexandrinus* lungo il litorale marchigiano. In: Brunelli M., Battisti C., Bulgarini F., Cecere J. G., Fraticelli F., Gustin M., Sarrocco S. & Sorace A. (eds), Atti del XV Convegno Italiano di Ornitologia. Alula 16 (1-2): 252-254.
- Morici F., Mencarelli M. & Morganti N., 2011. Indagine sulla distruzione dei nidi di Fratino (*Charadrius alexandrinus*) lungo il litorale di Senigallia (AN). In: Biondi M. & Pietrelli L. (eds), Il Fratino: status, biologia e conservazione di una specie minacciata. Atti del Convegno Nazionale. Edizioni Belvedere (LT), Le Scienze (13): 73-76.
- Scarton F., Valle R., Baldin M. & Scattolin M., 2004. La nidificazione del Fratino *Charadrius alexandrinus* Linnaeus, 1758 e del Fraticello *Sterna albifrons* Pallas, 1794 lungo i litorali del Comune di Venezia: un triennio di censimenti. Soc. veneziana Sc. nat. 29: 17-21.
- Tognetti D., 2011. La notevole escursione termica di inizio febbraio 2011. ASSAM Regione Marche, Servizio Agrometeo Regionale. www.meteo.marche.it.
- Tognetti D. & Busilacchi M., 2011. Analisi meteorologica dell'alluvione di inizio marzo 2011 nelle Marche. ASSAM Regione Marche, Servizio Agrometeo Regionale. www.meteo.marche.it.

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