

## NEW DATA REGARDING THE BREEDING OF THE FIELDFARE (*Turdus pilaris* LINNAEUS 1758) IN ARGEȘ COUNTY, ROMANIA

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**Abstract.** In this paper, the authors show new data regarding the breeding of the fieldfare (*Turdus pilaris* LINNAEUS 1758) in Argeș County. After 2000, it was observed in more localities from the upper and middle hydrographic basin of the Argeș River (with its tributaries) and from the upper hydrographic basin of the Dâmbovița River. There are some considerations about the biology of the breeding. Dârmănești (45°01') for the breeding proved by the presence of nests and Pitești (44°52') for the breeding proved by birds collecting food for the nestlings became the most southern points of observation of the species breeding in Argeș County. After almost 40 years from the first recording of the breeding in Argeș County, the Fieldfare is now probably a local and constant breeding species in the area.

**Keywords:** Fieldfare (*Turdus pilaris*), breeding, Argeș County, Romania.

**Rezumat. Date noi privind cuibăritul cocoșarului (*Turdus pilaris* LINNAEUS 1758) în județul Argeș, România.** În această lucrare, autorii prezintă noi date privind cuibăritul cocoșarului (*Turdus pilaris*) în județul Argeș. După anul 2000, acesta a fost observat în mai multe localități din bazinul superior și mijlociu al râului Argeș (cu afluenții acestuia) și din bazinul superior al râului Dâmbovița. Sunt făcute unele considerații despre biologia cuibăritului. Dârmănești (45°01'), pentru cuibăritul dovedit cu cuiburi, și Pitești (44°52'), pentru cuibăritul dovedit cu păsări colectând hrană pentru pui, devin cele mai sudice puncte de observație ale cuibăritului speciei în județul Argeș. După aproape 40 de ani de la prima înregistrare a cuibăritului în județul Argeș, cocoșarul este în prezent, probabil, o specie locală și constant cuibăritoare în zonă.

**Cuvinte cheie:** cocoșar (*Turdus pilaris*), cuibărit, județul Argeș, România.

### INTRODUCTION

The breeding of Fieldfare (*Turdus pilaris*) in Romania is still insufficiently established. The first mention of its breeding appears at the end of the 19<sup>th</sup> century, when Luzecki found it in Rarău and Giurnalău Mountains (LUZECKI, 1891) and Tschusi found it at Marginea – Suceava County (TSCHUSI, 1894). Then, probably, it disappeared or bred in very small number (PAȘCOVSCHI, 1970). However, Munteanu (MUNTEANU, 1974) considers that these observations (that mention the breeding in the Eastern Carpathians and even in the Southern Carpathians) are mistakes. Presently, it is known that it is a species that extends its area of breeding to the South and West (BRUUN et al., 1999). Probably, it penetrated again in Romania through Bukovina in the '60, in the Eastern Carpathians (Mânăstirea Humorului, Rădăuți, Vatra Dornei), (MUNTEANU, 1966; MUNTEANU, 1971). In Maramureș Depression, it is mentioned as breeding in 1972 (BÉRES, 1973a; BÉRES, 1973b). In Transylvania Piedmont, its breeding was proved in 1973 and 1977 (KORODI & BÉRES, 1979b; MUNTEANU, 1974; KOVATS, 1977). In 1974, respectively 1975, it bred near Brașov (CIOCHIA, 1992). In 1975, it already bred in the Southern Carpathians (RADU & ZSIROS, 1975) and in 1977 and 1978 it already bred in the western part of the Apuseni Mountains (KORODI & BÉRES, 1979b). Between 1973 and 1978, the Fieldfare was found as breeding bird in Bucegi Mountains (PASPALOVA & TĂLPEANU, 1978). In 1980, it was observed breeding at Reci, from Covasna County (MOLNÁR, 1983b), in 1988, at Sovata, from Mureș County (NEMETH, 1989), in 1989, in Buda and Beceni, from Buzău County (RADU, 1990) and in 1992, at Tescani, from Bacău County (RADU, 1992). Also, in 1990, in Piatra Craiului Mountains, at Plaiu Foi a pair was observed breeding (PETRESCU, 1995) and in 1995, a nest of *Turdus pilaris* was noted with a nestling of *Cuculus canorus* (PETRESCU & BÉRES, 1997). In 2001 and 2002, nests and nestlings were identified in or near buildings on the Bârsa valley, Măgura village and in the hayfields from Zărnești, in Piatra Craiului Mountains (FENERU et al., 2003-2006). In Podișul Târnavelor, few individuals were observed in the breeding season (Brădeni, June 12, 1999) close to two nests of *Lanius minor* (MITRULY, 2002). In the middle hydrographic basin of the Siret River, it is a summer visitor (RANG, 2002). Also, in Brașov, in 2002 and 2004, the Fieldfare was observed in the breeding season (MESTECĂNEANU, 2006; MESTECĂNEANU & CONETE, 2006, unpublished observations):

- near Gura Râului Chalet ("Hora cu Brazi"), 2 individuals on May 21, 2002 and 1 individual on June 24, 2002;
- near Plaiu Foi Chalet, 1 individual on May 23, 2002;
- near Cabana Lupului from Zărnești, few breeding birds into a group of poplar (*Populus* sp.) on May 24, 2002;
- in Măgura village, adults with juveniles on July 8, 2002;
- in Peștera village, adults with juveniles on July 9, 2002;
- Gura Râului Chalet, a pair on May 3, 2004;
- near Zărnești (at "Prăpăstii") toward Măgura village, 1 individual on May 3, 2004;
- near Zărnești on the Bârsa valley, 4 individuals on July 18, 2004 (on a meadow with scattered shrubs, close to an infield);
- in Măgura and Peștera villages (each, 1 individual on July 17, 2004).

Between 2002 and 2007, the bird was observed breeding in the forests, riverside coppices and open areas from Fizeș Plain (DAVID, 2008).

The breeding of the species was the subject or was mentioned in other works, too (BÉRES, 1977; KORODI & BÉRES, 1979a; LUCESCU, 1982; KORODI, 1983; MOLNÁR, 1983a; LUCESCU, 1984; IONESCU, 1990; LUCESCU, 1991; DAROCZI & KERÉKES, 1993; TRELEA, 2002; BURGHELEA, 2010; TONCEAN, 2010 etc.).

In the last years, its area of breeding covers hilly and mountainous areas from Transylvania, Bukovina, Maramureş, Moldavia, Muntenia, Oltenia and Crişana historical lands (CIOCHIA, 1992; RADU, 1993; MUNTEANU et al., 2002).

It is noticeable that in Argeş County, the first observation of the breeding was performed on May 8, 1975, when a nest with two nestlings was found. It was placed on a horizontal branch of a coniferous tree from Câmpulung – a landscape with high hills with mixed and broad leaf forests and rivulets (RADU & ZSIROS, 1975). Furthermore, its breeding was signalled in the Piatra Craiului Mountains area (MESTECĂNEANU, 2006) and near Piteşti (MESTECĂNEANU et al., 2007). Also, in the Câmpulung city it was observed breeding (MESTECĂNEANU, 2011). The atlases of the breeding birds from Romania attest its breeding in Argeş County, too (CIOCHIA, 1992, MUNTEANU et al., 2002).

Initially, Radu considers it as a bird of the Tetraonidae level (RADU, 1973), then of the Columbidae level (RADU, 1984). In the mountain hydrographical Basin of the Bistriţa Moldovenească River, Munteanu asserts that it is a bird of valleys and depressions – a family with 3 nestlings being observed in the park of Vatra Dornei on June 30, 1971 (MUNTEANU, 2000).

**MATERIALS AND METHODS**

Argeş County is situated in the south of Southern Carpathians, in the West of Muntenia land. It is 6,826.3 km<sup>2</sup>. In the North, the Făgăraş (with Moldoveanu – 2544 m – the highest peak of Romania), Piatra Craiului and Leaota Mountains dominate the landscape. They are continued by the Getic Subcarpathians (with medium heights of 600 – 800 m) and by the Getic Piedmont, with 400 – 600 m medium heights. The Romanian Plain covers its southern part (Fig. 1).

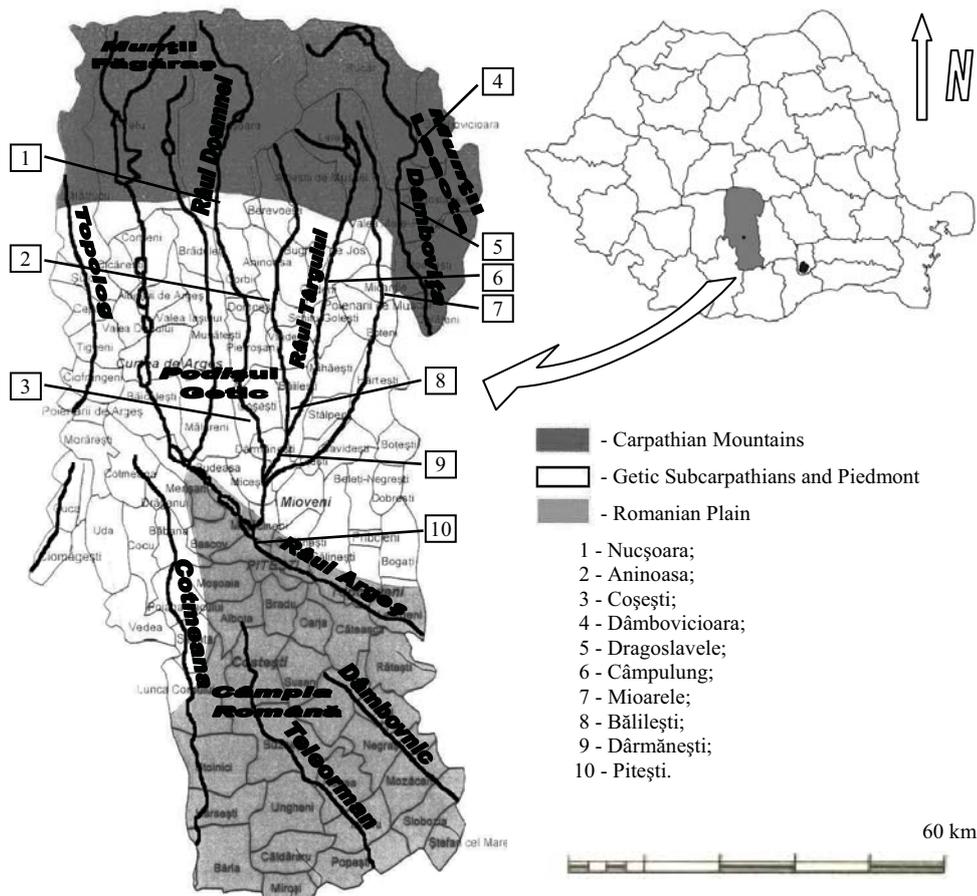


Figure 1. The administrative and physic map of Argeş County (source net).  
(1, 2, ..., 10 – localities of observations)

The climate is temperate-continental. It has features of mountainous climate in the North and of plain climate in the South. In the mountains, the annual average temperatures fall down to 0°C and the average precipitations exceed 1400 mm/year. In the lower zone, the annual average temperatures are between 6 and 9 °C and the average precipitations are between 700 and 1000 mm/year. In the plain area, the annual average temperatures exceed 10°C and the average precipitations are below 700 mm/year (BARCO & NEDELICU, 1974).

The hydrographic system of the Argeș County includes: the Topolog River, the Vedea River, and the Argeș River with its tributaries: the Vâlsan, the Râul Doamnei, the Râul Târgului, the Cârcinov, the Neajlov, and the Dâmbovița Rivers (BARCO & NEDELCU, 1974).

Argeș County has a wide variety of plants and animals that, generally, are specific to the southern part of Romania. The forests occupy most of the mountainous, submountainous and hilly area. They are formed mainly by spruce (*Picea abies*), beech (*Fagus sylvatica*), and oak (*Quercus* sp.). The hilly area is favourable for the plum tree (*Prunus domestica*) and apple tree (*Malus pumila*) orchards. The plain is occupied mostly by cereals (ALEXIU, 2008).

The Fieldfare (*Turdus pilaris*) is a bird from the thrushes family (Turdidae). It is 22 – 27 cm long with long tail and stocky constitution, being one of the biggest thrushes. In the field, it is identifiable by light grey rump, red-brown back and grey crown and nape. It is heavily spotted below. The breast has rusty-yellow tinge. Under wings, it is white. The juvenile is identified by the pale spots on wing-coverts. The flight is rather flapping, less undulating (SVENSSON et al., 2009).

It is distributed from the southeast of France, over the North, Middle and East of Europe to the upper Yenisey and Amur Rivers from Russia. The southern limit in Europe: from the southwestern Alps to the Southern Carpathians (HAGEMEIJER & BLAIR, 1997).

It breeds in many types of forests and bush scrub, also in parks, trees along avenues and gardens (SVENSSON et al., 2009). The Fieldfare is most typical in farmland and other cultivated landscape. It is both a solitary and colonial breeder (HAGEMEIJER & BLAIR, 1997).

There were no used special methods for the field observations. Generally, the registration of the Fieldfare breeding was occasioned by other research studies about the birds from the Argeș River hydrographic basin. The occurrence was again verified if it was possible.

## RESULTS AND DISCUSSIONS

Beginning with the year 2000, the probable and certain breeding of the Fieldfare in Argeș County was proved of many times:

- May 27, 2000, 1 individual with a flock of starlings (*Sturnus vulgaris*), adults and juveniles, in the meadow of the Râul Doamnei, at Dârmănești. It flew at 1 m above the soil toward the open riverside coppice of alder (*Alnus* sp.) from the vicinity, uttering typical sounds;

- May 28, 2000, 1 individual at the same place, feeding on the field together with a lot of starlings (*Sturnus vulgaris*). Its mate was found on the nest, in the alder riverside coppice from the vicinity, covering 5 eggs. Their average size was 28:20 mm. Their coloration was green-dark with small and brown patches. The nest was situated on the lateral branch (5 cm thick at the base) at its bifurcation, 1.7 m distance of the trunk and nearly 4 m far above the ground. It had 91 mm height and 145 mm diameter. The depth of the cup was 53 mm and the interior diameter was 96 mm. The material of construction was represented by straws and other vegetal strings. The interior was lined with fine straws and small races (Fig. 2a). The support tree was on the bank of the river at 50-60 m distance from one bridge of wood intensely circulated. It appertained to a small group of robust and young alders (15 m height);

- June 3, 2000, at the same place: 2 pairs: the older continuing the breeding and the newest breeding in a similar alder, positioned at 5 m distance of the river and 15 m distance from the first nest. This nest was well hidden in a group of twigs from the end of the lowest, horizontal and thick branch of the tree, at 1 m distance of the trunk and 2.5 m far above the ground (Fig. 2b). The birds were agitated because of a Magpie (*Pica pica*) that was too close to the nests, uttering vocal signals, like a crepitation. We mention that a pair of Lesser Grey Shrike (*Lanius minor*) was breeding in a willow (*Salix* sp.), at 15-20 m distance;

- June 13, 2000, at the same place: five 7 day old nestlings in the first nest and four 9 day old nestlings in the second nest (plus an infertile and elongated egg of 30:21 mm). The adults repeatedly attacked us, uttering the alarm calls. Frequently, they splashed us with a creamy, black and odourless paste, with granular aspect, at the minimum distance of attack in flight (50-80 cm);



Figure 2. Nests of *Turdus pilaris*: a) May 28, 2000 (original photo); b) June 3, 2000 (original photo).

- June 24, 2000, at the same place: 3 well flying juveniles, fed by the parents, recovered on July 11, 2000. In the following year many trees from the area were cleared and on their place a lime pit was built; later, a sheep yard appeared and the thrushes did not breed again;

- June 24, 2001, into a canopy of Common walnut (*Juglans regia*) from a line of Black Mulberry (*Morus nigra*), at Dârmănești, close to the road Dârmănești – Valea Nandrii, 2 flying young birds fed by parents with Worms (*Lumbricus* sp.) and mulberry fruits;

- April 23, 2003, in the forest of Carolina Poplar (*Populus canadensis*) of the Argeș River, close to Pitești city, 3 individuals were noted, on June 5, 2003 they carrying food to the nest;

- May 12, 2004, the bird was present at Cheile Dâmbovicioarei from Dâmbovicioara village;

- May 14, 2004, 6 individuals (including 2 weak flying juveniles) were observed within the built-up areas and on May 25, 2004, 2 individuals in the riverside coppice and in the grassland from Podu Dâmboviței (Dâmbovicioara village);

- May 26, 2004, 1 individual into a glade from a forest of beech (*Fagus sylvatica*) and spruce (*Picea abies*), and 1 individual at a edge of mature forest of beech (*F. sylvatica*) with the grassland, near Dragoslavele village;

- June 26, 2006, observed in Câmpulung city;

- May 6, 2007, 2 individuals (pair) collecting food (worms) and moving towards an orchard of apple trees, in Dârmănești village (Valea Nandrii). At the place of procurement of food (a muddy shore of one brook), disturbed by our presence, a bird started to alarm, calling and concomitantly flapping wings and tail;

- April 28, 2008, occurred into a mixed forest at Nucșoara;

- May 16, 2008, 1 individual, in the alder riverside coppice from Coșești village (Jupânești);

- May 31, 2009, 1 adult with 3 juveniles at Dârmănești, in the Râul Doamnei alder coppice;

- May 31, 2009, 1 adult with 1 juvenile into an orchard from Mioarele village;

- June 21, 2009, 1 individual, near “La Fermă” Lake from Nucșoara, in orchards;

- June 21, 2009, 1 individual with food in beak at Aninoasa village, in the alder riverside coppice of Slânic;

- June 27, 2009, 1 adult with food in beak at Dârmănești, in the Râul Doamnei alder coppice;

- July 11, 2009, 4 adults with 1 juvenile weak flying, at Dârmănești, in the Râul Doamnei alder coppice;

- April 25, 2010, 2 individuals, at Bălilești village (Băjești), in the alder riverside coppice of Bratia River and on July 11, 2010, 1 individual, at Bălilești village (Băjești), in the same place;

- May 20, 2010, 8 individuals (2 adults with 5 juveniles) observed in the Public Garden of Câmpulung city; on June 13, 2010, 1 individual and on July 3, 2010, 2 individuals in the Public Garden, too. The park vegetation is composed mainly by Conker tree (*Aesculus hippocastanum*) and Silver Lime (*Tilia tomentosa*).

Hence, after 2000, in Argeș County, the Fieldfare was found certainly breeding in the localities: Dârmănești and Pitești (from LK1 UTM quadrade of 50x50 km<sup>2</sup>), Câmpulung, Mioarele and Aninoasa (from LL2 UTM quadrade of 50x50 km<sup>2</sup>) and Dâmbovicioara (from LL4 UTM quadrade of 50x50 km<sup>2</sup>) and probably breeding in Nucșoara (from LL2 UTM quadrade of 50x50 km<sup>2</sup>), Dragoslavele (from LL4 UTM quadrade of 50x50 km<sup>2</sup>), Coșești and Bălilești (from LK1 UTM quadrade of 50x50 km<sup>2</sup>). As in conformity to the “Păsările clocitoare din România” (CIOCHIA, 1992), the Fieldfare breeds in Argeș in the LL2 and LL4 UTM quadrates of 50x50 km<sup>2</sup> and in conformity to the “Atlasul păsărilor clocitoare din România” (MUNTEANU et al., 2002), it breeds in Argeș in the LL4 UTM quadrade of 50x50 km<sup>2</sup>, a new quadrade (LK1) can be so added on the map of the Fieldfare breeding.

Considering that Pitești belongs to the plain area, Dârmănești, Coșești and Bălilești belong to the hilly area, Câmpulung, Mioarele and Aninoasa belong to the submountainous area and Dâmbovicioara, Nucșoara and Dragoslavele belong to the mountain area, it is noticeable that the Fieldfare prefers to breed in the area starting from the foot of the mountain region to the plain area, inclusively.

Pitești is in the middle hydrographic basin of the Argeș River itself, Nucșoara, Câmpulung, Mioarele, Aninoasa, Dârmănești, Coșești and Bălilești are in the Râul Doamnei hydrographic basin and Dâmbovicioara and Dragoslavele are in the Dâmbovița River hydrographic basin.

The previously known most southern point of breeding for the species in our country was in Câmpulung Muscel Depression (45°18'), near Lerești (RADU, 1993). According to our observation, this point is Dârmănești (45°01') for the breeding proved by the presence of nests and Pitești (44°52') for the breeding proved by birds collecting food for the nestlings.

The altitude of breeding (above sea level) varied from 268 m, in the forest of poplar nearby Pitești, to 878 m (probably breeding), in Cheile Dâmbovicioarei (respectively 760 m, in Podu Dâmboviței). In Europe, the birds breed up to 2000 m asl. (RADU, 1993).

The observed birds bred in the alder riverside coppice (at Aninoasa, Bălilești, Coșești, Dârmănești), and, probably, at the edge of forests (at Dâmbovicioara, Dragoslavele, Nucșoara), in a forest of Caroline poplar (near Pitești), in the canopy of walnut or mulberry from a cultivated area (at Dârmănești), in orchards (at Dârmănești, Mioarele, Nucșoara) and in the built-up area (at Câmpulung, Dâmbovicioara). It is obvious the feature of the species to approach to the anthropogenic environment enounced by Radu (RADU, 1993).

The behaviour of defending of the nests observed by other authors (RADU, 1993; RADU & ZSIROS, 1975) was registered by us, too; in a case, the Fieldfares uttered vocal signals of alarm against a Magpie and, in other, against us, while they even splashed us with a creamy paste to protect the nestlings. A curious behaviour was observed at the location of collecting of the food, when a bird started to alarm disturbed by our presence.

The earliest breeding observed by us is the one registered at Podu Dâmboviței (Dâmbovicioara), when 2 weak flying juveniles were noticed on May 14, 2004 (the probable date of laying eggs: April 10-15). In the scientific literature, for Romania, the earliest date of laying eggs is April 5, (KORODI & BÉRES, 1979b).

Other authors (KORODI & BÉRES, 1979b; MOLNÁR, 1983a; MOLNÁR, 1983b; RADU, 1992) remarked the presence of nests of Great Grey Shrike (*Lanius excubitor*) in the colonies of Fieldfare. Instead, like Mitruly at Brădeni, we observed a nest of Lesser Grey Shrike (*Lanius minor*), probably with the same function of protection (RADU, 1993).

The species was observed in the breeding season in: 2000, 2001, 2003, 2004, 2006, 2007, 2008, 2009, and 2010. This means that at present (after nearly 40 years from the first observation) the Fieldfare is probably a local and constant breeding species in the area.

## CONCLUSIONS

- After 2000, in Argeș County, the Fieldfare was found certainly breeding in the localities: Aninoasa, Câmpulung, Dâmbovicioara, Dârmănești, Mioarele and Pitești and probably breeding in Bălilești, Coșești, Dragoslavele and Nucșoara;
- A new quadrat (LK1, in the UTM system) can be so added on the map of the Fieldfare breeding;
- The Fieldfare prefers to breed in the area from the foot of the mountain region to the plain area, inclusively;
- The observed points of breeding are situated in the Argeș River middle hydrographic basin itself, in the Râul Doamnei hydrographic basin and in the upper hydrographic basin of Dâmbovița River;
- The most southern point of observation of the breeding for the species in Argeș County is Dârmănești (45°01') for the breeding proved by the presence of nests and Pitești (44°52') for the breeding proved by birds collecting food for the nestlings;
- The altitude of breeding (above sea level) varied from 268 m, in the poplar forest nearby Pitești, to 878 m (probably breeding), in Cheile Dâmbovicioarei (respectively 760 m, in Podu Dâmboviței);
- The observed birds bred in the alder riverside coppice, and probably at the edge of forests, in a forest of Caroline poplar, in the canopy of walnut or mulberry from a cultivated area, in orchards and in the built-up area;
- It was noticed the behaviour of defending of the nests;
- The earliest breeding observed by us is the one registered at Podu Dâmboviței (Dâmbovicioara), when 2 weak flying juveniles were noticed on May 14, 2004;
- After nearly 40 years from the first observation, the Fieldfare is probably a local and constant breeding species in the area.

In the future, it is expected that the Fieldfare to appear as breeding species in other places from Argeș County and from the southern part of Romania, too. We consider that the riverside coppices along the great rivers and the parks from the cities will have a great importance in this slowly expansion of its breeding area southwards.

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