

**ORNITHOLOGICAL OBSERVATIONS IN THE NATURAL
PROTECTED AREA „POIANA CU NARCISE” FROM NEGRAȘI,
ARGEȘ COUNTY**

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ABSTRACT. During February – June 2009, in the communitarian important site, part of Nature 2000 Network, “Poiana cu narcise” from Negrași, 61 birds' species were registered. They belong to ten orders: Ciconiiformes, Anseriformes, Falconiformes, Galliformes, Charadriiformes, Columbiformes, Cuculiformes, Coraciiformes, Piciformes and Passeriformes. Their phenology and their status of breeding were taken into account. The most of species was breeding species. Because of the habitat diversity they placed the nests on the trees' branches, in the hollows, in the bushes or on soil. The site is situated near cultivated lands, forests and human settlements, fact that influences the qualitative aspect of the avifauna. Only 4 species (*Ciconia ciconia*, *Anthus campestris*, *Lanius collurio* and *Lanius minor*) are protected by the Annex I of the Birds Directive.

Key words: birds, Poiana cu Narcise, Negrași, Argeș, Romania.

REZUMAT. Observații ornitologice în zona protejată “Poiana cu Narcise” de la Negrași, județul Argeș. În perioada februarie – iunie 2009, în situl de importanță comunitară “Poiana cu Narcise” de la Negrași, parte a Rețelei Natura 2000, au fost identificate 61 de specii de păsări. Ele aparțin ordinelor: Ciconiiformes, Anseriformes, Falconiformes, Galliformes, Charadriiformes, Columbiformes, Cuculiformes, Coraciiformes, Piciformes și Passeriformes. Sunt luate în discuție fenologia și statutul lor de protecție. Majoritatea speciilor au fost specii cuibăritoare. Datorită diversității habitatului, ele și-au amplasat cuiburile pe ramurile arborilor, în scorburi, în tufișuri sau pe sol. Situl este situat în preajma unor terenuri cultivate, păduri și așezări omenești, fapt care influențează aspectul calitativ al avifaunei. Doar patru specii (*Ciconia ciconia*, *Anthus campestris*, *Lanius collurio* și *Lanius minor*) sunt protejate de Anexa I a Directivei Păsări.

Cuvinte cheie: păsări, Poiana cu Narcise, Negrași, Argeș, România.

INTRODUCTION

“Poiana cu narcise” from Negrași, in conformity with the Order No. 1964 from Decembrie 13, 2007, modified by the Order No. 2387 from September 29, 2011, was declared natural protected area of communitarian importance (ROSCI0203), as integrant part of the Nature 2000 Network in Romania

(cf. <http://www.legex.ro>, <http://www.monitoruljuridic.ro>). The aim of the area set-up was to protect the narcissus (*Narcissus poeticus* ssp. *radiiflorus*) – endangered European taxon (Alexiu et al., 2011).

The ornithological researches did not perform in the area until now.

MATERIAL AND METHOD

“Poiana cu narcise” from Negrași is situated in Negrași village from the southern part of the Argeș County, at 181 m altitude, near the road that links the Negrași and Mozacu hamlets. It is 4.6 ha surface and belongs to the Dâmbovcnic hydrographical basin (river that has the sources in the terrace of the Argeș River, south of Pitești), (Fig. 1). Thus, it is to the limit between the Câmpia Piteștiului and Câmpia Găvanu-Burdea (Alexiu et al., 2011).



Figure 1 - The map of the upper hydrographical basin of the Dâmbovcnic River (by Barco & Nedelcu, 1974) and the position of the “Poiana cu narcise” from Negrași site (in Google Earth view).

The climate is temperate - continental with characteristics of plain; the average annual temperature is 10 - 11 °C, the average temperature of January is nearly -3 °C and the average temperature of June is nearly 21 °C. The annual average of the precipitations is closely 600 mm. The wind blows mainly from North-West (Barco & Nedelcu, 1974).

Nearly whole “Poiana cu narcise” reservation from Negrași is bordered by one cordon of trees and shrubs, especially *Populus x canadensis* and *Crataegus* sp. The most southern population from Romania of *Narcissus poeticus* ssp. *radiiflorus* (in the same time, the lowest population from Romania) breeds within the

perimeter. It is a mezo-hygrophilous and oligotrophic floristic element, because of the underground water of small deep and of the illuvial clay, brown-red, poorly podzolic soils. The trophic and hydric regime of the area, that is similar with the mountain one, favours its growth. Other protected species of flora from the Red List of Romania are: *Knautia macedonica*, *Orchis laxiflora* ssp. *elegans*, *Myosotis discolor*, next to which develop species characteristically of the hilly and mountain zone: *Montia verna*, *Potentilla erecta*, *Ranunculus flammula*, *Ranunculus aquatilis*, *Taraxacum palustre* etc.

According to the Habitats Directive, here two kinds of endangered habitats were identified: Alluvial meadows of river valleys of the *Cnidion dubii* and Lowland hay meadows (*Alopecurus pratensis* and *Sanguisorba officinalis*), (Alexiu et al., 2011). The adjacent territories are cultivated mainly with cereals.

The system of channels built for the water drain, the inappropriate pasturage (excessively or absent, the later conducting to a accentuate overgrown of grass) and, equally, the barbarous tourism (when the narcissuses are collected or, at least, titubated, mainly during the fete from the beginning of May) constitute the main causes of the site degradation and the measures of protection must directed against them (Alexiu et al., 2011).

The guide Hamlyn (Bruun et al., 1999) and one binocular 10x50 were used for the identification of the birds. The field researches were performed in February, March, April, May and June, 2009. Each month, one sample of 1 – 2 hours was effectuated. The method of fixed point observations was used (Munteanu, 2000).

RESULTS AND DISCUSSIONS

During the researches performed in 2009 in the site “Poiana cu narcise” from Negrași, 61 birds’ species were registered (Tab. 1). They belong to 10 orders: Ciconiiformes, Anseriformes, Falconiformes, Galliformes, Charadriiformes, Columbiformes, Cuculiformes, Coraciiformes, Piciformes and Passeriformes (Bruun et al., 1999).

Depending on their predominant phenology, 5 of the species (8.20%) are in the area migrant species, 23 (37.70%) are summer visitors, 18 (29.51%) are resident, 4 (6.56%) are partial migrant and 11 (18.03%) are winter visitors (Tab. 1). It is obvious that the percentages of the species that live here mainly in summer (summer visitors, residents, partial migrants – 73.77%) are much higher than the percentages of the species that live here mainly in winter (winter visitors, residents, partial migrants – 54.1%). This fact show that in the warmer period of the year the area has greater trophic supplies that in the colder one.

Regarding the status of breeding, 24 species did not breed in the area (39.34%); 16 (26.23%) were probably breeding species and 21 (34.43%) were certainly breeding species (Tab. 1). The status of breeding was considered according to the criteria from “The Atlas of the breeding birds from Romania”

(Munteanu et al., 2002). So, over half of the number of registered species (37 species, 60.66%) bred in the area (certainly or probably). They breed and feed here (*Dendrocopos major*, *Anthus campestris*, *Lanius collurio*, *Troglodytes troglodytes*, *Sylvia atricapilla* etc.) or breed here and feed mainly on the neighbourhood terrains (*Falco tinnunculus*, *Pica pica*, *Corvus monedula*, *Corvus corone cornix* etc.).

Some species breed in the trees canopy (*Falco tinnunculus*, *Streptopelia turtur*, *Oriolus oriolus*, *Corvus corone cornix* etc.), others in the hollows of the trees (*Upupa epops*, *Dendrocopos major*, *Parus caeruleus*, *Sitta europaea* etc.), others in the bushes (*Lanius collurio*, *Sylvia communis*, *Sylvia curruca*, *Luscinia megarhynchos* etc.) and others on the soil (*Perdix perdix*, *Phasianus colchicus*, *Vanellus vanellus*, *Alauda arvensis* etc.).

Despite of "Poiana cu narcise" belongs to the plain region, because of the trees and shrubs of here and of the fact that the site is 2 – 3 km away from the Mozacu Forest, the most of the registered species (33 species – 54.09%: *Buteo buteo*, *Phasianus colchicus*, *Streptopelia turtur*, *Cuculus canorus*, *Upupa epops*, *Dendrocopos major*, *Anthus trivialis*, *Oriolus oriolus*, *Sturnus vulgaris*, *Garrulus glandarius*, *Corvus corax*, *Troglodytes troglodytes*, *Sylvia atricapilla*, *Sylvia curruca*, *Phylloscopus collybita*, *Regulus regulus*, *Erethacus rubecula*, *Luscinia megarhynchos*, *Turdus merula*, *Turdus philomelos*, *Turdus viscivorus*, *Turdus pilaris*, *Parus palustris*, *Parus caeruleus*, *Parus major*, *Aegithalos caudatus*, *Sitta europaea*, *Passer montanus*, *Fringilla coelebs*, *Fringilla montifringilla*, *Coccothraustes coccothraustes*, *Carduelis spinus* and *Carduelis carduelis*) are species preponderant of open or dense forests, with or without bush level. Some of these species came here to breed; some came here from vicinity only in search of food. The species adapted to live in the open are – agricultural terrains, grasslands or rocky areas, generally, interspersed with shrubs and scattered trees – are in the second place as number (20 species – 32.78%: *Falco tinnunculus*, *Falco subbuteo*, *Perdix perdix*, *Vanellus vanellus*, *Galerida cristata*, *Alauda arvensis*, *Anthus campestris*, *Anthus spinoletta* – alpine species, *Motacilla flava*, *Motacilla alba*, *Lanius collurio*, *Lanius minor*, *Pica pica*, *Corvus frugilegus*, *Corvus corone cornix*, *Sylvia communis*, *Saxicola torquata*, *Carduelis cannabina*, *Miliaria calandra* and *Emberiza citrinella*). Few species (6) are anthropogenic species: *Corvus monedula* breeds in the area; *Ciconia ciconia* breeds in the centre of Negrași village and here searches the food; *Streptopelia decaocto*, *Hirundo rustica*, *Delichon urbica* and *Passer domesticus* came here from the neighbourhood villages in search of food, too. They constitute 9.83% of all. Only 2 species (3.27%) are characteristically to the wetlands: *Ardea cinerea* and *Anas platyrhynchos*.

Regarding the status of conservation conferred by the Birds Directive (cf. <http://www.anpm.ro>) only 4 species (6.55%: *Ciconia ciconia*, *Anthus campestris*, *Lanius collurio* and *Lanius minor*) are included in the Annex I. They shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution (Tab. 1).

Table 1 - The list of the birds species observed in the site “Poiana cu narcise” from
 Negrași, their phenology, breeding and status of protection according to the Birds Directive.

| No. | Species | Phenology | Breeding | Birds Directive |
|-----|--|-----------|----------|-----------------|
| 1 | <i>Ardea cinerea</i> (Linnaeus, 1758) | P, SV | NB | |
| 2 | <i>Ciconia ciconia</i> (Linnaeus, 1758) | P, SV | NB | AI |
| 3 | <i>Anas platyrhynchos</i> Linnaeus, 1758 | P | NB | AII/A, AIII/A |
| 4 | <i>Buteo buteo</i> (Linnaeus, 1758) | R | NB | |
| 5 | <i>Falco subbuteo</i> Linnaeus, 1758 | SV, P | NB | |
| 6 | <i>Falco tinnunculus</i> Linnaeus, 1758 | PM | CB | |
| 7 | <i>Perdix perdix</i> (Linnaeus, 1758) | R | PB | AII/A, AIII/A |
| 8 | <i>Phasianus colchicus</i> Linnaeus, 1758 | R | PB | AII/A, AIII/A |
| 9 | <i>Vanellus vanellus</i> (Linnaeus, 1758) | SV | PB | AII/B |
| 10 | <i>Streptopelia turtur</i> (Linnaeus, 1758) | SV | PB | AII/B |
| 11 | <i>Streptopelia decaocto</i> (Frivaldszky, 1838) | R | NB | AII/B |
| 12 | <i>Cuculus canorus</i> Linnaeus, 1758 | SV | PB | |
| 13 | <i>Upupa epops</i> Linnaeus, 1758 | SV | PB | |
| 14 | <i>Dendrocopos major</i> (Linnaeus, 1758) | R | CB | |
| 15 | <i>Galerida cristata</i> (Linnaeus, 1758) | R | PB | |
| 16 | <i>Alauda arvensis</i> Linnaeus, 1758 | SV | CB | AII/B |
| 17 | <i>Hirundo rustica</i> Linnaeus, 1758 | SV, P | NB | |
| 18 | <i>Delichon urbica</i> (Linnaeus, 1758) | SV, P | NB | |
| 19 | <i>Anthus trivialis</i> (Linnaeus, 1758) | P | NB | |
| 20 | <i>Anthus campestris</i> (Linnaeus, 1758) | SV | PB | AI |
| 21 | <i>Anthus spinoletta</i> (Linnaeus, 1758) | WV, P | NB | |
| 22 | <i>Motacilla flava</i> Linnaeus, 1758 | SV | CB | |
| 23 | <i>Motacilla alba</i> Linnaeus, 1758 | P, SV | NB | |
| 24 | <i>Lanius collurio</i> Linnaeus, 1758 | SV | CB | AI |
| 25 | <i>Lanius minor</i> Gmelin, 1788 | SV | PB | AI |
| 26 | <i>Oriolus oriolus</i> Linnaeus, 1766 | SV | CB | |
| 27 | <i>Sturnus vulgaris</i> Linnaeus, 1758 | SV, P | CB | AII/B |
| 28 | <i>Garrulus glandarius</i> (Linnaeus, 1758) | R | CB | AII/B |
| 29 | <i>Pica pica</i> (Linnaeus, 1758) | R | CB | AII/B |
| 30 | <i>Corvus monedula</i> (Linnaeus, 1758) | R | CB | AII/B |
| 31 | <i>Corvus frugilegus</i> Linnaeus, 1758 | R | NB | AII/B |
| 32 | <i>Corvus corone cornix</i> Linnaeus, 1758 | R | CB | AII/B |
| 33 | <i>Corvus corax</i> Linnaeus, 1758 | R | NB | |
| 34 | <i>Troglodytes troglodytes</i> Linnaeus, 1758 | SV | PB | |
| 35 | <i>Sylvia atricapilla</i> (Linnaeus, 1758) | SV | CB | |
| 36 | <i>Sylvia communis</i> Latham, 1787 | SV | CB | |
| 37 | <i>Sylvia curruca</i> (Linnaeus, 1758) | SV | CB | |
| 38 | <i>Phylloscopus collybita</i> (Vieillot, 1817) | SV | CB | |
| 39 | <i>Regulus regulus</i> (Linnaeus, 1758) | WV | NB | |
| 40 | <i>Saxicola torquata</i> (Linnaeus, 1766) | SV | PB | |
| 41 | <i>Erithacus rubecula</i> (Linnaeus, 1758) | SV | PB | |

Continues.

Table 1 - Continuation.

| No. | Species | Phenology | Breeding | Birds Directive |
|-----|---|-----------|----------|-----------------|
| 42 | <i>Luscinia megarhynchos</i> (Brehm, 1831) | SV | PB | |
| 43 | <i>Turdus merula</i> Linnaeus, 1758 | PM | CB | AII/B |
| 44 | <i>Turdus philomelos</i> Brehm, 1831 | SV | CB | AII/B |
| 45 | <i>Turdus viscivorus</i> Linnaeus, 1758 | WV | NB | AII/B |
| 46 | <i>Turdus pilaris</i> Linnaeus, 1758 | WV | NB | AII/B |
| 47 | <i>Parus palustris</i> (Linnaeus, 1758) | R | PB | |
| 48 | <i>Parus caeruleus</i> (Linnaeus, 1758) | R | PB | |
| 49 | <i>Parus major</i> Linnaeus, 1758 | R | CB | |
| 50 | <i>Aegithalos caudatus</i> (Linnaeus, 1758) | WV | NB | |
| 51 | <i>Sitta europaea</i> Linnaeus, 1758 | R | CB | |
| 52 | <i>Passer domesticus</i> (Linnaeus, 1758) | R | NB | |
| 53 | <i>Passer montanus</i> (Linnaeus, 1758) | R | CB | |
| 54 | <i>Fringilla coelebs</i> Linnaeus, 1758 | WV | NB | |
| 55 | <i>Fringilla montifringilla</i> Linnaeus, 1758 | WV | NB | |
| 56 | <i>Coccothraustes coccothraustes</i> (Linnaeus, 1758) | WV | NB | |
| 57 | <i>Carduelis spinus</i> (Linnaeus, 1758) | WV | NB | |
| 58 | <i>Carduelis carduelis</i> (Linnaeus, 1758) | WV | NB | |
| 59 | <i>Carduelis cannabina</i> (Linnaeus, 1758) | PM | PB | |
| 60 | <i>Miliaria calandra</i> (Linnaeus, 1758) | PM | CB | |
| 61 | <i>Emberiza citrinella</i> Linnaeus, 1758 | WV, P | NB | |

Legend: P – species of passage; SV – summer visitor; WV – winter visitor, R – resident, PM – partial migrant, NB – nonbreeding species, PB – probably breeding species, CB – certainly breeding species, AI – annex I, AII – annex II, AIII – annex III, A – part A, B – part B.

CONCLUSIONS

The avifauna observed during February – June 2009 in the protected area “Poiana cu Narcise” from Negrași has 61 species. The most species were summer visitors, the area being less favourable for the birds in winter. The breeding species built their nest in the trees canopy, in the hollows of the trees, in bushes or on the soil, among the short vegetation.

Only 4 species (*Ciconia ciconia*, *Anthus campestris*, *Lanius collurio* and *Lanius minor*) are in the Annex I of the Birds Directive, they being the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.

The occurrence of the trees and bushes, that enclosed like a belt band the reservation, attracts many species of forest, which breed here or came here from the neighbourhoods for the food.

Considering the habitat, with the agricultural areas, forests and wetlands in the vicinity, and the position of the site on the route of the migratory birds and extending the period of surveillance, the list of the species observed in the Reservation “Poiana cu narcise” from Negrași may grows considerably.

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