

( ) ( ) ( )

## Survey of Avifauna in the Jajerud and Damavand basin, South of the Alborz Mountains

PARVIZ BAKHTIARI & MOHAMMAD TOHIDIFAR\*

*Biodiversity & Habitats Division, Department of Environment, Science & Research Unit, Islamic Azad  
University, Tehran*

*\* Correspondence Author. Email: mohammad\_8463@yahoo.com*

*Received 15 January 2006; accepted 16 May 2007*

---

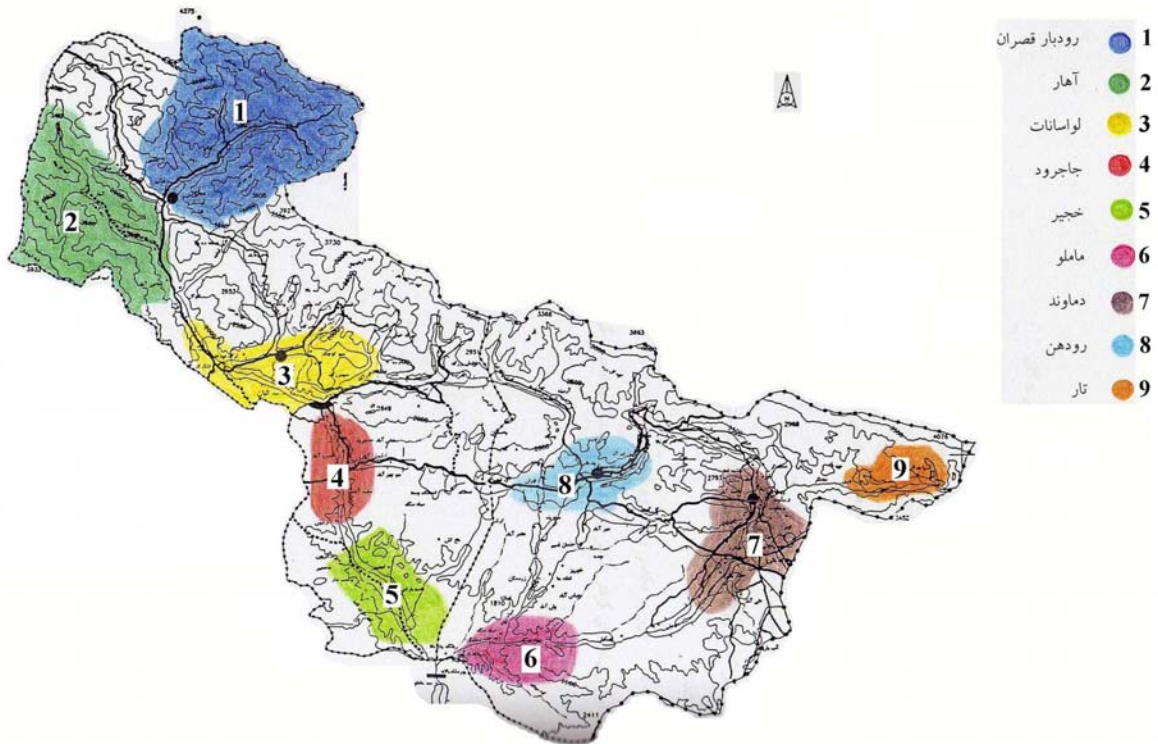
**Abstract:** The Jajerud and Damavand basin extends to the southern Alborz heights in the north and the Varamin plain in the south. This basin has established ranges of fauna and flora types because it possesses considerable altitudinal variation encompassing many biotas. In this survey, the basin was divided into ten sub-basins that covered all the biotas therein. 173 bird species were identified visually using binoculars and from capture using mist nets, hand nets and a projector. 35 of these species are protected by the Iranian Environmental Laws. Among the families, the most numerous was Turdidae, with 21 species. Of the ten sub-basins Khojir (88 species) and Jajerud (71 species) held the highest species totals, while the Tar had the lowest (21 species).

**Keywords:** Avifauna, Jajerud, Khojir, Damavand, Basin, Tehran province.

---



Figure 1. View of Lake Tar, © M. Tohidifar.



**Figure 2.** Map of the Jajerud and Damavand basin. 1= Rudbar, 2= Ahar, 3= Lavasan, 4= Jajerud, 5= Khojir, 6= Mamlu, 7= Damavand, 8= Rudehen and 9= Tar.

**Table 1.** Type of habitats in sub-basins.

( ) Tar (Fig. 1)	Rudehen	Damavand	Mamlu	Sorkhe- Hesar	Khojir	Jajerud	Lavasani	Ahar	Rudbar	Habitat
*							*			Lake /
*		*		*	*			*	*	Mount./
*	*		*	*	*	*				Hillsid./
	*	*		*	*	*	*	*	*	Orchard /
	*	*	*		*					Farm /
		*	*		*	*	*	*	*	River /
			*	*		*				Range /
				*		*				Reedbed /
				*	*		*			Forest /
										-۱
										-۲
										-۳
										-۴
										-۵
										-۶
										-۷
										-۸
										-۹
										-۱۰

= . -  
/ =P/S =O =R =S =W =P -  
=BN =KS / =P/W

**Table 2.** Avifauna of Jajerud and Damavand basin and sub-basins and their status. 1= birds observed during 2003-2006, P=passage visitor, W=winter visitor, S=summer visitor, R=resident, O= occasional visitor (or straggler) from nearby areas or rare species, P/S=passage/summer visitor, P/W=passage/winter visitor, KS= Observed by Khaleghizadeh & Sehhatisabet (2007), BN= observed by Bagher Nezami in April 2007.

Scientific name	Status	Rudbar	Ahar	Lavasan	Jajerud	Khojir 1	Khojir	Sorkhe- Hesar 1	Mamlu	Damavand	Rudehen	Tar	Persian name
<i>Tachybaptus ruficollis</i>	W			*			*						
<i>Podiceps cristatus</i>	W			*KS									
<i>Podiceps auritus</i>	P rare			*KS									
<i>Podiceps nigricollis</i>	P			*KS									
<i>Phalacrocorax carbo</i>	W			*KS			*						
<i>Egretta garzetta</i>	P			*KS									
<i>Ardea cinerea</i>	W/P			*	*	*	*		*				
<i>Casmerodius albus</i>	P			*	*	*	*		*				
<i>Bubulcus ibis</i>	P			*KS									
<i>Nycticorax nycticorax</i>	P				*	*							
<i>Ixobrychus minutus</i>	P			*KS									
<i>Botaurus stellaris</i>	W rare				*								
<i>Anas penelope</i>	W				*		*		*				
<i>Anas strepera</i>	W			*	*		*		*				
<i>Anas crecca</i>	W			*	*	*	*		*				
<i>Anas platyrhynchos</i>	W/P	*		*	*	*	*		*				
<i>Anas acuta</i>	P			*	*		*		*				
<i>Anas clypeata</i>	W				*		*						
<i>Milvus milvus</i>	V							*					
<i>Milvus migrans</i>	P									*	*		
<i>Gypaetus barbatus</i>	O	*					*						
<i>Neophron percnopterus</i>	P						*						
<i>Gyps fulvus</i>	O						*						( )
<i>Circaetus gallicus</i>	P/S							*					
<i>Circus macrourus</i>	P							*		*			
<i>Accipiter brevipes</i>	P									*			
<i>Accipiter nisus</i>	W	*		*	*	*	*	*		*			
<i>Accipiter gentilis</i>	W				*				*	*			

Scientific name	Status	Rudbar	Ahar	Lavasan	Jajerud	Khojir 1	Khojir	Sorkhe- Hesar 1	Mamlu	Damavand	Rudehen	Tar	Persian name
<i>Buteo buteo</i>	P		*	*	*	*	*	*	*	*	*	*	
<i>Buteo rufinus</i>	O			*KS				*	*				
<i>Aquila nipalensis</i>	P							*					
<i>Aquila chrysaetos</i>	R	*	*	*	*	*	*	*	*	*	*	*	
<i>Falco naumanni</i>	S			*KS				*					
<i>Falco tinnunculus</i>	R	*	*	*	*	*	*	*	*	*	*	*	
<i>Falco columbarius</i>	W rare			*KS									
<i>Falco subbuteo</i>	S			*KS	*	*			*				
<i>Falco cherrug</i>	W								*	*			
<i>Falco peregrinus</i>	W	*		*							*		
<i>Falco pelegrinoides</i>	O			*			*						
<i>Ammoperdix griseogularis</i>	R				*	*	*		*				
<i>Alectoris chukar</i>	R	*	*	*	*	*	*	*	*		*	*	
<i>Coturnix coturnix</i>	P/S						*	*	*				
<i>Rallus aquaticus</i>	W/P			*									
<i>Fulica atra</i>	P			*	*							*	
<i>Charadrius dubius</i>	P/S			*KS									
<i>Scolopax rusticola</i>	W			*	*								
<i>Gallinago gallinago</i>	W/P					*							
<i>Lymnocyptes minimus</i>	W/P			*KS									
<i>Tringa erythropus</i>	P			*KS									
<i>Tringa totanus</i>	P			*KS									
<i>Tringa ochropus</i>	W/P	*	*	*	*	*	*		*	*			
<i>Actitis hypoleucos</i>	P			*KS									
<i>Calidris minuta</i>	P			*KS									
<i>Larus canus</i>	P			*KS									
<i>Larus cachinnans</i>	P			*KS									
<i>Larus ichthyaetus</i>	P			*KS									
<i>Larus ridibundus</i>	P			*									
<i>Columba livia</i>	R	*	*	*	*		*		*	*	*	*	
<i>Columba oenas</i>	W rare			*KS									
<i>Columba palumbus</i>	O			*KS	*	*	*	*		*			
<i>Streptopelia turtur</i>	S				*		*						

Scientific name	Status	Rudbar	Ahar	Lavasan	Jajerud	Khojir 1	Khojir	Sorkhe- Hesar 1	Mamlu	Damavand	Rudehen	Tar	Persian name
<i>Streptopelia senegalensis</i>	R	*	*	*	*		*	*	*	*	*		
<i>Psittacula krameri</i>	R	*	*	*	*		*	*		*			
<i>Cuculus canorus</i>	S						*		*		*		
<i>Tyto alba</i>	R rare									*			
<i>Otus scops</i>	S								*	*			
<i>Bubo bubo</i>	R		*	*				*					
<i>Strix aluco</i>	O rare			*KS									
<i>Athene noctua</i>	R			*			*	*	*		*	*	
<i>Caprimulgus europaeus</i>	S					*	*						
<i>Tachymartus melba</i>	S	*	*	*		*						*	
<i>Apus apus</i>	S			*	*	*	*	*	*	*	*		
<i>Alcedo atthis</i>	W/P		*	*KS	*	*	*			*			
<i>Merops apiaster</i>	P/S	*	*	*	*	*	*	*	*	*	*	*	
<i>Coracias garrulus</i>	P/S			*	*	*	*		*	*	*		
<i>Upupa epops</i>	P			*	*	*	*	*	*		*		
<i>Jynx torquilla</i>	P					*BN							
<i>Dendrocopos syriacus</i>	R	*	*	*	*	*	*	*		*			
<i>Alaemon alaudipes</i>	O							*					
<i>Melanocorypha calandra</i>	P								*		*		
<i>Calandrella brachydactyla</i>	S						*						
<i>Galerida cristata</i>	R			*KS		*	*	*	*		*	*	
<i>Alauda arvensis</i>	P			*KS		*	*	*	*		*		
<i>Eremophila alpestris</i>	O			*KS						*		*	
<i>Riparia riparia</i>	P			*KS									
<i>Hirundo rupestris</i>	P			*KS									
<i>Hirundo rustica</i>	P/S			*KS	*		*			*	*		
<i>Delichon urbicum</i>	P			*KS									
<i>Motacilla alba</i>	R	*	*	*	*	*	*		*	*	*	*	
<i>Motacilla cinerea</i>	W	*	*	*	*		*		*	*	*	*	
<i>Anthus spinoletta</i>	W/P			*KS	*								
<i>Pycnonotus leucotis</i>	R	*		*	*	*	*	*		*	*		

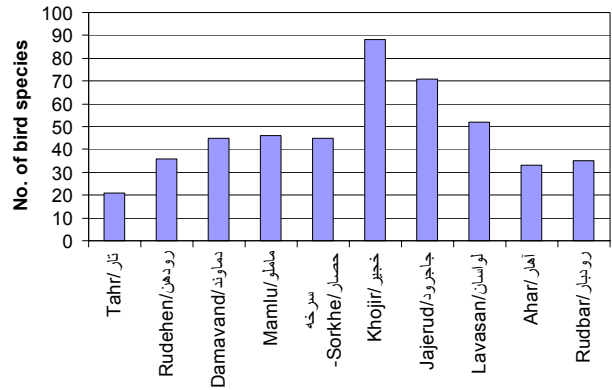
Scientific name	Status	Rudbar	Ahar	Lavasan	Jajerud	Khojir 1	Khojir	Sorkhe- Hesar 1	Mamlu	Damavand	Rudehen	Tar	Persian name
<i>Lanius collurio</i>	P			*KS	*		*						
<i>Lanius minor</i>	S				*		*	*					
<i>Lanius excubitor</i>	S			*					*		*		
<i>Cinclus cinclus</i>	W	*	*	*KS	*		*		*	*			
<i>Troglodytes troglodytes</i>	W			*KS									
<i>Prunella ocularis</i>	W				*		*						
<i>Prunella modularis</i>	W			*KS									
<i>Erithacus rubecula</i>	W/P			*	*		*						
<i>Luscinia megarhynchos</i>	S			*	*		*			*			
<i>Irania gutturalis</i>	S						*BN						
<i>Cercotrichas galactotes</i>	S				*				*				
<i>Phoenicurus ochruros</i>	P			*KS			*	*					
<i>Phoenicurus phoenicurus</i>	P			*	*		*	*					
<i>Saxicola torquatus</i>	P/W						*		*		*		
<i>Oenanthe oenanthe</i>	S	*	*				*	*			*	*	
<i>Oenanthe finschii</i>	P			*				*					
<i>Oenanthe pleschanka</i>	S							*					
<i>Oenanthe hispanica</i>	S			*KS			*				*		
<i>Oenanthe xanthopyrna</i>	S	*					*					*	
<i>Oenanthe isabellina</i>	S			*KS			*	*					
<i>Monticola saxatilis</i>	S	*	*									*	
<i>Monticola solitarius</i>	P						*BN						
<i>Turdus merula</i>	W/P			*			*	*					
<i>Turdus ruficollis</i>	W						*						
<i>Turdus pilaris</i>	P			*KS									
<i>Turdus iliacus</i>	W/P			*KS									
<i>Turdus philomelos</i>	W/P			*KS	*								
<i>Turdus viscivorus</i>	P			*KS									
<i>Scotocerca inquieta</i>	R				*								

Scientific name	Status	Rudbar	Ahar	Lavasan	Jajerud	Khojir 1	Khojir	Sorkhe- Hesar 1	Mamlu	Damavand	Rudehen	Tar	Persian name
<i>Cettia cetti</i>	R		*	*	*		*			*			
<i>Acrocephalus schoenobaenus</i>	P			*KS									
<i>Acrocephalus scirpaceus</i>	P/S				*					*			
<i>Hippolais pallida</i>	S			*	*		*						
<i>Hippolais languida</i>	S	*	*	*	*		*			*			
<i>Phylloscopus collybita</i>	P/S				*				*				
<i>Phylloscopus trochilus</i>	P			*KS									
<i>Sylvia atricapilla</i>	P			*KS		*							
<i>Sylvia borin</i>	P			*KS	*								
<i>Sylvia communis</i>	P			*KS									
<i>Sylvia curruca</i>	P			*KS									
<i>Sylvia hortensis</i>	P				*		*			*			
<i>Sylvia mystacea</i>	S			*	*		*						
<i>Muscicapa striata</i>	P/S			*KS	*	*		*					
<i>Ficedula hypoleuca</i>	P			*KS									
<i>Ficedula parva</i>	P			*KS									
<i>Parus major</i>	R	*	*	*	*	*	*	*	*	*	*		
<i>Parus caeruleus</i>	W			*	*		*			*			
<i>Sitta neumayer</i>	R	*	*		*	*	*	*	*	*	*		
<i>Sitta tephronota</i>	R	*	*		*	*	*	*	*				
<i>Tichodroma muraria</i>	O			*KS									
<i>Emberiza citrinella</i>	W/P			*KS		*		*					
<i>Emberiza leucocephalos</i>	W/P			*KS									
<i>Emberiza cia</i>	W/P		*	*KS	*	*	*		*				
<i>Emberiza melanocephala</i>	S			*KS	*		*				*		
<i>Emberiza schoeniclus</i>	P			*KS									
<i>Emberiza calandra</i>	P/S						*	*					
<i>Fringilla coelebs</i>	W		*	*	*	*	*	*		*			



Scientific name	Status	Rudbar	Ahar	Lavasan	Jajerud	Khojir 1	Khojir	Sorkhe- Hesar 1	Mamlu	Damavand	Rudehen	Tar	Persian name
<i>Fringilla montifringilla</i>	W			*KS									
<i>Serinus pusillus</i>	P/S			*KS				*		*			
<i>Carduelis chloris</i>	P			*KS				*					
<i>Carduelis spinus</i>	P			*KS									
<i>Carduelis carduelis</i>	P			*KS					*	*	*		
<i>Carduelis flavirostris</i>	P	*	*	*KS								*	
<i>Carduelis cannabina</i>	P			*KS				*			*		
<i>Rhodopechys sanguinea</i>	O			*KS									
<i>Rhodopechys obsoleta</i>	O			*KS									
<i>Coccothraustes coccothraustes</i>	W			*KS									
<i>Passer domesticus</i>	R	*	*	*	*	*	*	*	*	*	*		
<i>Passer montanus</i>	R					*				*	*		
<i>Petronia petronia</i>	O	*										*	
<i>Montifringilla nivalis</i>	O	*										*	
<i>Sturnus vulgaris</i>	P/S			*	*		*	*		*	*		
<i>Acridotheres tristis</i>	R			*KS	*			*					
<i>Oriolus oriolus</i>	S			*KS	*		*						
<i>Pica pica</i>	R	*	*	*	*	*	*	*	*	*	*	*	
<i>Pyrrhonorax pyrrhonorax</i>	R	*	*	*						*		*	
<i>Pyrrhonorax graculus</i>	R	*	*										
<i>Corvus monedula</i>	O			*KS									
<i>Corvus frugilegus</i>	R	*	*	*	*	*	*	*	*	*	*		
<i>Corvus corone</i>	R	*	*	*	*	*	*	*	*	*	*		
<i>Corvus corax</i>	R	*	*		*								
<b>No. visits per area (Spring)</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>1</b>	
<b>No. visits per area (Summer)</b>		<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	
<b>No. visits per area (Autumn)</b>		<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	
<b>No. visits per area (Winter)</b>		<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	
<b>Total bird species</b>		<b>35</b>	<b>33</b>	<b><math>\frac{52+71}{123}</math></b>	<b>71</b>	<b>51</b>	<b>74</b>	<b>45</b>	<b>46</b>	<b>45</b>	<b>36</b>	<b>21</b>	

(Khaleghizadeh & Sehatisabet 2007)



**Figure 3.** Bird species numbers observed at each sub-basin.

(Scott *et al.* 1975)

)

(...

(IBA)

(Evans 1994)

Khaleghizadeh & Sehatisabet 2007, )

(Evans 1994



(*Sitta neumayer*)

**Figure 4.** Nest of Western Rock Nuthatch *Sitta neumayer* at Khojir, autumn 1999, © P. Bakhtiari.

%

( )

(Khaleghizadeh & Sehatisabet 2007)

( )

Laws and )

CITES II I

(Parliamentary Affairs Office 2004

(Khaleghizadeh & Sehatisabet 2007)

(NT)

(NT)

(VU)

(EN)

(Scott 2007)

IUCN

(Bird Sanctuary)

## REFERENCES

- Dayani A., Behrouzi-Rad B. 1985. Avifauna of Khojir and Sorkheh-Hesar National Parks. **In:** University of Tehran (eds.), *Environmental evaluation of Khojir and Sorkheh-Hesar National Parks*. DoE Iran publications. 444 pp. [In Persian]
- Dayani A., Behrouzi-Rad B., Amir-Ahmadi K. 1986. A study of bird community at Khojir National Parks. *Iranian Journal of Natural Resources* **40**: 69–76. Karaj. [In Persian]
- Evans, M.I. (Comp.) 1994. *Important Bird Areas in the Middle East*. BirdLife International, Cambridge, U.K. 410 pp
- Khaleghizadeh A., Sehhatiasabet M.E. 2007. Avifaunal survey of the Latian Dam and Lashgarak Area, an important IBA for migrants in Iran. *Sandgrouse* **29(1)**: 53–69.
- Laws and Parliametary Affairs Office 2004. *Directory of Laws and Regulations of the Environment of Iran*. Iran Department of the Environment. 975 pp. [In Persian]
- Scott D.A., Hamadani M.H., Mirhosseyni A.A. 1975. *The Birds of Iran*. Iran Department of the Environment, Tehran. 409 pp. [In Persian]
- Scott D.A. 2007. The birds of the Latian Dam and Lashgarak Area, Tehran, Islamic Republic of Iran-June 1972 to February 1976. *Sandgrouse* **29(1)**: 35–52.



**Table 3.** Birds species under protection of IUCN, CITES and Iranian Environmental laws and regulations.

	IRAN	IUCN	CITES
<i>Ardea cinerea</i>			
<i>Casmerodius albus</i>			
<i>Bubulcus ibis</i>			
<i>Nycticorax nycticorax</i>			
<i>Ixobrychus minutus</i>			
<i>Botaurus stellaris</i>			
<i>Milvus milvus</i>		NT	II
<i>Milvus migrans</i>			II
<i>Gypaetus barbatus</i>			II
<i>Neophron percnopterus</i>			II
<i>Gyps fulvus</i>			II
<i>Circaetus gallicus</i>			II
<i>Circus macrourus</i>		NT	II
<i>Accipiter brevipes</i>			II
<i>Accipiter nisus</i>			II
<i>Accipiter gentilis</i>			II
<i>Buteo buteo</i>			II
<i>rufinus Buteo</i>			II
<i>Aquila nipalensis</i>			II
<i>Aquila chrysaetos</i>			II
<i>Falco naumanni</i>		VU	II
<i>Falco tinnunculus</i>			II
<i>Falco columbarius</i>			II
<i>subbuteo Falco</i>			II
<i>Falco cherrug</i>		EN	II
<i>Falco peregrinus</i>			I
<i>Falco pelegrinoides</i>			I
<i>Tyto alba</i>			
<i>Otus scops</i>			
<i>Bubo bubo</i>			
<i>Strix aluco</i>			
<i>Athene noctua</i>			
<i>Hirundo rustica</i>			
<i>Luscinia megarhynchos</i>			
<i>Acridotheres tristis</i>			
<b>Total</b>	<b>35</b>	<b>4</b>	<b>21</b>