

THE STATUS OF DIURNAL BIRDS OF PREY IN TURKEY

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ABSTRACT.—Here, I summarize the current status of diurnal birds of prey in Turkey. This review was based on field surveys conducted in 2001 and 2002, and a literature review. I completed 661 field surveys in different regions of Turkey in 2001 and 2002. I recorded 37 species of diurnal raptors, among the 40 species known in the country. In addition, some adverse factors such as habitat loss, poisoning, killing, capturing or disturbing raptors, and damaging their eggs were seen during observations.

KEY WORDS: *Eastern Europe, population status, threats, Turkey.*

ESTATUS DE LAS AVES DE PRESA DIURNAS EN TURQUÍA

RESUMEN.—Aquí resumo el estatus actual de las aves de presa diurnas en Turquía. Esta revisión está basada en muestreos de campo conducidos en 2001 y 2002, y en una revisión de la literatura. Completé 661 muestreos de campo en diferentes regiones de Turquía en 2001 y 2002. Registré 37 especies de rapaces diurnas del total de 40 especies conocidas para el país. Además, registré algunos factores adversos como pérdida de hábitat, envenenamiento, matanzas, captura o disturbio de rapaces y daño de sus huevos durante las observaciones.

[Traducción del equipo editorial]

Turkey, with approximately 454 bird species, has a relatively rich avian diversity in Europe. Despite recognized importance of the country in supporting a significant biodiversity, mapping of the avifauna has not occurred and there are few data on the status of birds in Turkey.

Among the birds of Turkey are included 40 diurnal birds of prey and 10 owls. For Europe and the Middle East, Forsman (1998) lists 42 raptors, Glutz et al. (1987) list 41, and Gensbol (1986) lists 46 species. Weick (1980) and Kiziroglu et al. (1993) reported 39 diurnal raptors in Turkey. This was increased to 40 with the addition of the Barbary Falcon (*Falco pelegrinoides*; Kirwan et al. 1998). However, the number of the studies on raptors in Turkey is minimal and little is known about their distribution. Kumerloeve (1970) provided the first significant contribution on the status and distribution of raptors in Turkey. The initial focus of research on raptors in Turkey was migration. Although the number of studies in eastern Europe examining birds have increased recently, there are still little data and information available on the size of raptor populations and their conservation.

Here, I present a summary of species-specific ob-

servations of diurnal raptors collected during 2001–02 from locations throughout Turkey.

METHODS

Turkey is divided into seven geographical regions (Fig. 1; Erol et al. 1982) characterized by variable landscape types, climate differences, and a rich diversity of fauna. Field data were obtained from surveys conducted in all areas of Turkey between 1 January 2001–31 December 2002. Many observations were based on a combination of the field surveys and data from birdwatchers and others (Toygar 2001, 2002). The remaining observations were gathered from the trip reports of visiting ornithologists in Turkey (Balmer and Betton 2001, Comas et al. 2001, Dyczkowski 2001, Merril 2001, Swann 2001, Balmer and Betton 2002, Eriksen and Eriksen 2002, Giannatos, 2002, Klim 2002).

The methodology used was derived from standardized bird-survey techniques (Bibby et al. 1998), and from transect counts (Bibby et al. 2000). Daily surveys were conducted in the middle of the day from 0900–1300 H at 134 selected localities within 43 of 81 provinces in 2001, and 197 localities within 54 provinces in 2002. Observation grids were used to evaluate all observations and records (Fig. 1; Appendix).

During the observations, 162 line transects were used to assess nonbreeding raptor populations over extensive areas. The mean distance of transects was 5098 m. Most of the observations were made by teams of one to three observers, often one person to verify identification and one person to record data. Also, 499 spot counts were made and evaluated to assess the populations of some raptor species. The mean spot counts per survey was 1.47.

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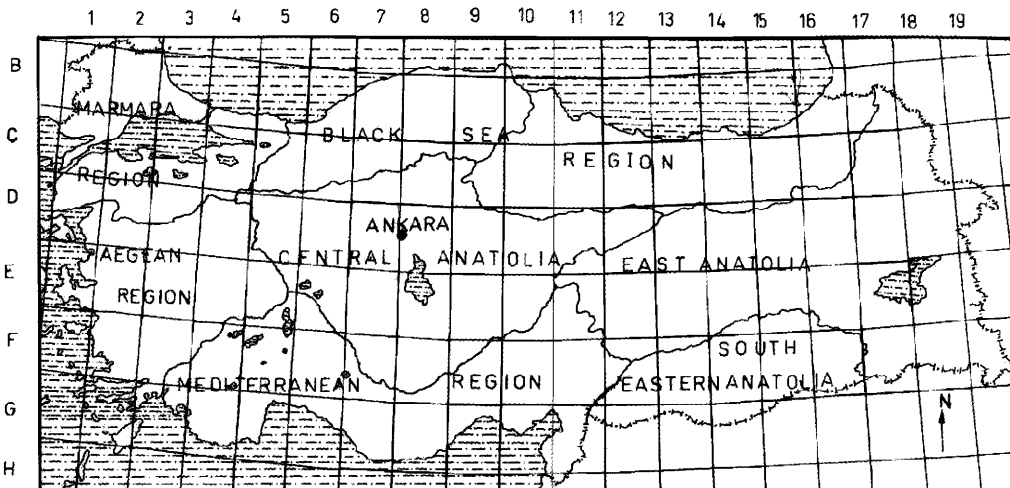


Figure 1. Geographical regions of Turkey and observation grids used in evaluation and surveys in 2001 and 2002.

Spot counts were conducted during selected stops at locations with a good view. A single observer systematically scanned the sky for 5 min and counted all raptors visible with the naked eye. The coordinates of spot counts were recorded with a Global Positioning Receiver System and binoculars were used to aid in the identification of the species.

Definitions used to describe the status of birds in Turkey are as follows (Weaver 1981, Kiziroglu 1989):

Resident: A bird that is present all year and breeds regularly.

Summer visitor: A bird that uses a particular area for breeding only and is not present outside the breeding season.

Winter visitor: A bird that visits a particular area only during the winter and does not occur there during its breeding period.

Migrant: A bird that occurs irregularly and may be seen on migration, sometimes in great numbers.

Vagrant: A bird for which there are only one or a few records a year in Turkey.

RESULTS AND DISCUSSION

Assistants and I recorded diurnal raptors at 134 sites during 324 observation periods in the year 2001, and 197 sites during 416 observations in the year 2002. The data collected during 2001 and 2002 were compatible with each other to a great extent in terms of effort and number of raptors recorded. Observations of the individual species were as follows:

Most Frequently Observed Raptors. *European Honey-buzzard (Pernis apivorus).* The honey buzzard is a summer visitor and migrant. It was seen during 15 surveys between March–September 2001, including one observation of 550 migrants in Istanbul

(Marmara region) on 2001. It was also seen 15 times during surveys between April–November 2002, but none were recorded in July.

Black Kite (Milvus migrans). This resident raptor species was seen on 16 surveys, during all the months of 2001 with the exception of February. One unexpected observation occurred in south-east Anatolia (Gaziantep Province), registered in December and involved 400 individuals (Demircan 2001). In 2002, Black Kite was observed 17 times between April–September, with no records noted in July. According to Clark (1999) Black Kites are local summer breeders throughout most of Europe. Most Black Kites leave Europe for winter, but some stay in Turkey and in the Middle East.

White-tailed Eagle (Haliaeetus albicilla). Fairly common resident and winter visitor, the White-tailed Eagle was recorded five times during 5 mo in 2001 and eight times in January, April, May, and December in 2002. White-tailed Eagles in Turkey are from the southeastern European population. The individuals of this population were smaller and have lighter-colored heads. They mostly reside in Caucasus, Greece, and in parts of Bulgaria. In Turkey, this species generally lives near inland seas, whereas in northern Europe, this bird occurs in coastal plains. The population in Turkey was estimated at no more than 100 pairs (Vaassen 2001). Most of the individuals of this species have short migratory ranges.

Egyptian Vulture (Neophron percnopterus). The

Egyptian Vulture is one of the four vulture species that is widespread in Turkey. A summer visitor and rare transient, the Egyptian Vulture was seen on 13 surveys every month between March–September 2001 and 19 times between March–September 2002, with the exception of August.

Cinereous Vulture (Aegypius monachus). This resident raptor species is the largest bird of prey in Turkey. It was observed 10 times during 4 mo between March–October in 2001. It was seen six times between February–November 2002, with the exception of May, July, and August.

Short-toed Snake-Eagle (Circaetus gallicus). An abundant summer visitor and migrant species, the Short-toed Snake-Eagle was seen on 23 occasions and during every month between February–October 2001. During two surveys in September, 25 and 34 migrants were recorded. Also, 39 migrants were recorded during one survey in October 2001. This raptor was recorded 27 times between March–November 2002, with the exception of July.

Western Marsh Harrier (Circus aeruginosus). This raptor is the most abundant harrier in Turkey. The Marsh Harrier is a resident, partial migrant, and winter visitor. Although Clark (1999) mentioned that it was rare and local, I found that these harriers were abundant. It was seen 76 times throughout 2001 and 109 times in every month of 2002.

Northern Harrier (Circus cyaneus). Although a very common winter visitor and migrant, the Northern Harrier was very rare in summer. I recorded it on 37 occasions between September–April 2001, 57 times and during every month of 2002, with the exception of June–August.

Montagu's Harrier (Circus pygargus). A summer visitor and migrant, Montagu's Harrier was seen 15 times in every month of 2001, with the exception of May, June, October, and December. This harrier was observed on 11 occasions in 2002 between April–October, with the exception of May and July.

Northern Goshawk (Accipiter gentilis). This uncommon resident was seen on 10 occasions in 7 mo of 2001, and six times in 5 mo of 2002.

Eurasian Sparrowhawk (Accipiter nisus). A common resident and very common migrant in Turkey. This species was recorded 58 times in 2001 and 54 times during every month in 2002.

Levant Sparrowhawk (Accipiter brevipes). The Levant Sparrowhawk was a summer visitor and migrant species. During one survey in September 2001, 68 migrants were recorded. However, it was

observed only on five occasions in September 2002.

Common Buzzard (Buteo buteo). A common, widespread resident and migrant, the Common Buzzard was the second most frequently recorded raptor (100 observations) in 2001. During one survey in September 2001, 640 migrants were recorded. The Common Buzzard was the most commonly-observed raptor species ($N = 121$) in 2002.

Long-legged Buzzard (Buteo rufinus). A very common resident and abundant winter visitor, the Long-legged Buzzard was generally seen in semi-arid and mountainous areas. It was the most frequently recorded raptor species ($N = 109$) in 2001, and the second most frequently recorded raptor ($N = 115$) in 2002.

Lesser Spotted Eagle (Aquila pomarina). The Lesser Spotted Eagle is a common migrant and scarce summer visitor of forests with bordering plains throughout Turkey. It was recorded on 22 occasions in 9 mo. In 2001, 3424 migrants were recorded during one survey in September and 130 migrants during a survey in October. It was also seen 15 times in 2002 between April–October, with the exception of July.

Greater Spotted Eagle (Aquila clanga). A winter visitor and partial migrant raptor. It was recorded eight times in 2001 and nine times in 2002.

Imperial Eagle (Aquila heliaca). The Imperial Eagle is a rare resident, winter visitor, and migrant in Turkey. It was observed in small numbers in 2001 and on 12 occasions between February–August 2002. The Imperial Eagle has been classified as a globally-threatened species (Collar et al. 1994), and breeding populations have declined throughout southern Europe, North Africa, and the Middle East (Cramp and Simmons 1980, Biber 1990, Clark 1999).

Golden Eagle (Aquila chrysaetos). The most widespread resident eagle species in Turkey, the Golden Eagle was seen on 18 occasions in 8 mo of 2001 and 15 times in different regions in 2002, with the exception of August and September. Even though Vaassen (2001) suggested that Golden Eagles were the most common *Aquila* in Turkey (2000–3000 pairs), there were no Golden Eagles sighted in February, April, August, and December in 2001.

Booted Eagle (Hieraaetus pennatus). The Booted Eagle is a common summer visitor and migrant. It breeds in forests with a mixture of open ground in hilly or mountainous topography. Booted Eagles

were seen on 14 occasions during 8 mo of 2001 and 15 times during 6 mo of 2002.

Bonelli's Eagle (Hieraaetus fasciatus). A rarely seen resident species, Bonelli's Eagles were recorded five times during 4 mo of 2001, and five times during 5 mo of 2002. European populations of this species have experienced a marked decline and this raptor is considered a vulnerable species (Rocamora 1994, Clark 1999). Real et al. (1996) estimated that a peripheral, sedentary population with ca. 1000 pairs inhabits the Mediterranean area of Europe.

Osprey (Pandion haliaetus). The Osprey is a rare summer visitor and migrant raptor. Ospreys were recorded seven times in February, March, August, September, and November 2001, and four times in 4 mo of 2002. The Osprey has historically bred in the Marmara and Black Sea regions (Vaassen 2001). However, even though they were observed, they have not been found breeding recently in that region (Vaassen 2001).

Lesser Kestrel (Falco naumanni). The Lesser Kestrel is a small colonially-nesting falcon distributed throughout Turkey. It is present in the summer and is a rare winter visitor that mostly winters in Africa and south of the Sahara Desert (Cramp and Simmons 1980, Clark 1999). This species was observed nine times between March–October. During two surveys in August 2001, 70 and 10 migrants were recorded, respectively, and 25 migrants were recorded during one survey in September. In 2002, it was observed on 23 occasions in every month, with the exception of September. The Lesser Kestrel was previously considered as one of the most abundant raptors in Europe (Bijleveld 1974), but it has recently become extinct in several countries (Biber 1990). Parr and Y arar (1993) stated that the population of Lesser Kestrels in Turkey was 1500–3500 pairs, ranking as the second-largest population in the world.

Eurasian Kestrel (Falco tinnunculus). The Eurasian Kestrel is the most widespread resident falcon species in Turkey. This falcon was found mostly in open country, on plains, and arable fields. They were also common in urban habitat. It was observed on 98 occasions in 2001 and 97 times in 2002.

Red-footed Falcon (Falco vespertinus). The Red-footed Falcon is a migrant and rare summer visitor in Turkey. During two surveys in August 2001, 10 and 70 migrants were recorded, respectively. Also 25 migrants were seen during one survey in Septem-

ber 2001. This bird was observed on 12 occasions in 2002, outside of the breeding season (May–August).

Eleonora's Falcon (Falco eleonora). This raptor species is a rare summer visitor, but it is widespread in Turkey during migration. The Eleonora's Falcon was observed on six occasions in 2001 and only twice in 2002.

Merlin (Falco columbarius). The Merlin is a fairly common winter visitor and migrant found throughout the country. Merlins from central Asia also winter in Turkey (Clark 1999). In 2001, it was observed on nine occasions during January, February, April, and December 2001, and 13 times during January, April, May, September, and October of 2002. However, no evidence of breeding was recorded.

Eurasian Hobby (Falco subbuteo). A common summer visitor, the hobby breeds in a variety of habitats. It was observed on 22 occasions, between April–October 2001, and 22 times between April–October 2002, with the exception of July.

Peregrine Falcon (Falco peregrinus). The Peregrine Falcon is a fairly common summer visitor and resident. This large falcon was seen on 20 occasions during 11 mo of 2001, with the exception of May. It was also seen 27 times in 9 mo of 2002, with the exception of May, September, and October. Clark (1999) stated that most populations of peregrines had a marked decline between 1950–70 due to various persistent pesticides.

Infrequently-detected Species. The Red Kite (*Milvus milvus*) and Rough-legged Hawk (*Buteo lagopus*) were recorded only once in both 2001 and 2002. The Pallid Harrier (*Circus macrourus*) and Steppe Eagle (*Aquila nipalensis*) were recorded only once in 2001, and four times in 2002. Both species only migrate through Turkey. However, sporadic breeding records of Pallid Harrier in Turkey have been recorded (Clark 1999). Turkey is the primary geographic region supporting Bearded Vultures (*Gypaetus barbatus*) in Europe and the Middle East. It is widespread across Turkey into the Caucasus (Clark 1999) and a very rare and local resident in high mountains; however, its numbers are declining. Svennson et al. (1999) estimated that there were only 500 pairs left within this region. Bearded Vulture was recorded only once in 2001, and five times in 2002. The Eurasian Griffon (*Gyps fulvus*) is primarily a resident in the mountains of the Mediterranean area, particularly in Turkey. Breeding griffons in most of Turkey are migratory and

leave in winter (Clark 1999). The population in the western half of the country has undergone a significant decline (Kasperek 1992). Griffons were seen on five occasions in 2002. The Sooty Falcon (*Falco concolor*) was recorded on two occasions in 2001 and not seen in 2002. Lanner Falcons (*Falco biarmicus*) and Saker Falcons (*Falco cherrug*) were seen on 2–5 occasions both in 2001 and 2002. The last species was observed only once in 2002.

Species Not Recorded in 2001 and 2002. The Barbary Falcon (*Falco pelegrinoides*) was not observed in either 2001 or 2002. This species was seen in Birecik, southeastern Anatolia in 1990–94, but has not been observed since. Therefore, I classify it as a “vagrant.” The Oriental Honey-buzzard (*Pernis ptilorhynchus*), and Black-winged Kite (*Elanus caeruleus*) are very rare raptor species. They were not sighted in 2001 or 2002.

Due to their position on top of the food chain, diurnal raptors occur in relatively small numbers and, therefore, are more subject to declines or extinctions than other birds. The problems facing raptors in Turkey are similar to that elsewhere. Agricultural insecticides are still responsible for the decline of some raptor populations in Turkey (Vaassen 2001). In addition, sparrowhawks are hunted in northeastern Turkey (Turan 1986). Though not very common, I have documented that some raptors were captured for falconry. Occasionally, a large sum will be paid in the Middle East for a bird trained for falconry (Turan 1986). Although the Turkish government has initiated an intensive hunter-training program, there still exists a problem of illegal hunting.

This study summarizes data obtained from field surveys carried out in different regions of Turkey over a 2-yr period. No comparable data from previous years were available. For this reason, I urge that future surveys be conducted to track the change of raptor populations in Turkey.

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LITERATURE CITED

- BALMER, D. AND K. BETTON. 2001. Around the region 2001 Turkey. *Sandgrouse* 23:156.
- AND ———. 2002. Around the region 2002 Turkey. *Sandgrouse* 24:1–4.
- BIBBY, C., M. JONES, AND S. MARSDEN. 1998. Expedition field techniques, bird surveys. Royal Geographic Society, London, U.K.
- , N.D. BURGESS, AND D.A. HILL. 2000. Bird census techniques. 2nd Ed. Academic Press, London, U.K.
- BIBER, J.P. 1990. Action plan for the conservation of western Lesser Kestrel *Falco naumanni* populations. ICBP Study Report, No. 41, Cambridge, U.K.
- BIJLEVELD, M. 1974. Birds of prey in Europe. Mac Millan Press, London, U.K.
- CLARK, W.S. 1999. A field guide to the raptors of Europe, the Middle East, and North Africa. Oxford Univ Press, New York, NY U.S.A.
- COLLAR, N.J., M.J. CROSBY, AND A.J. STATTERSFIELD. 1994. Birds to watch 2: the world list of threatened birds. Birdlife Conservation Series No.4. BirdLife International, Cambridge, U.K.
- COMAS, A., P. FELIU, H. PERXACS, AND D. SAAVEDRA. 2001. <http://www.osme.org/osmetrip/turk19.html>.
- CRAMP, S. AND K.E.L. SIMMONS (EDS.). 1980. The birds of the western Palearctic. Vol. 2. Oxford Univ. Press, Oxford, U.K.
- DEMIRCAN, S. 2001. Important records on Black Kite *Milvus migrans*. *Ibik* 1:1–29.
- DYCKZKOWSKI, J. 2001. Trip reports, Turkey. <http://www.osme.org/osmetrip/turk15.html>.
- ERIKSEN, H. AND J. ERIKSEN. 2002. Trip reports, Turkey <http://www.osme.org/osmetrip/turk21.html>.
- EROL, E., V. STÖHR, AND W. DENK. 1982. Die naturräumliche Gliederung der Türkei. Karte 1: 2000000. Tübinger Atlas des Vorderen Orients, Blatt A VII 2. Univ. Tübingen, Tübingen, Germany.
- FORSMAN, D. 1998. The raptors of Europe and the Middle East: a handbook of field identification. T. & A.D. Poyser, Calton, U.K.
- GENSBOLE, B. 1986. Collins guide to the birds of prey of Britain and Europe, North Africa, and the Middle East. Collins Press, London, U.K.
- GIANNATOS, G. 2002. Trip reports, Turkey. <http://www.osme.org/osmetrip/turk17.html>.
- GLUTZ, U.N., K.M. BAUER, AND E. BEZZEL. 1987. Handbuch der Vögel Mitteleuropas. Aula, Wiesbaden, Germany.
- KASPAREK, M. 1992. Die Vögel der Türkei: eine übersicht. Kasperek Verlag, Heidelberg, Germany.
- KIRWAN, G.M., R.P. MARTINS, G. EKEN, AND P. DAVIDSON. 1998. Checklist of the birds of Turkey. *Sandgrouse* 1 1–32.
- KIZIROGLU, I. 1989. Türkiye Kuşları. Desen Ofset, Ankara, Turkey.
- , L. TURAN, AND A. ERDOGAN. 1993. Ein Beitrag zur Türkischen Greifvogelfauna und ihrer Gefährdungsgrade. *H.Ü. Egit. Fak. Derg.* 9:271–279.
- KLIM, R. 2002. Trip reports, Turkey. <http://www.osme.org/osmetrip/turk20.html>.
- KUMERLOEVE, H. 1970. Zur kenntnis der Avifauna der

- Kleinasiens und der Europaischen Türkei. *Istanbul. Tip. Fak. Mecm.* 35:85–160.
- MERRIL, I. 2001. Trip reports, Turkey. <http://www.osme.org/osmetrip/turk16.html>.
- PARR, S. AND M. YARAR. 1993. Preliminary results from a Lesser Kestrel survey of Turkey, spring 1993. *Ornithol. Soc. Middle East Bull.* 31:8–10.
- REAL, J., S. MANOSA, AND J. CODINA. 1996. Estatus, demografía y conservación del águila perdicera en el Mediterráneo. Pages 83–90 in J. Muntaner and J. Mayol [Eds.], *Biología y conservación de las rapaces Mediterráneas*, 1994. BirdLife International, Madrid, Spain.
- ROCAMORA, G. 1994. Bonelli's Eagle (*Hieraaetus fasciatus*). Pages 184–185 in G.M. Tucker and M.F. Heath [Eds.], *Birds in Europe: their conservation status*. BirdLife International, Cambridge, U.K.
- SWANN, B. 2001. Trip reports, Turkey. <http://www.osme.org/osmetrip/turk14.html>.
- SVENNSON, L., P.J. GRANT, K. MULLARNEY, AND D. ZETTERSTROM. 1999. *Collins bird guide*. Harper Collins Publishers, London, U.K.
- Toygar e-group. 2001. Recent records in Toygar e-group on the bird species in Turkey. <http://groups.yahoo.com/group/toygar>.
- . 2002. Recent records in Toygar e-group on the bird species in Turkey. <http://groups.yahoo.com/group/toygar>.
- TURAN, L. 1986. Hunting with using of the birds of prey in Turkey. *J. Fac. Educ.* 12:207–210.
- VAASEN, E.W. 2001. Recent status of birds of prey in Turkey. Poster at 4th Eurasian Congress on Raptors, 25–29 September 2001, Seville, Spain.
- WEAVER, P. 1981. *The birdwatcher's dictionary*. T. & A.D. Poyser Ltd., Cambridge, U.K.
- WEICK, F. 1980. *Greifvögel der Welt*. P. Parey, Hamburg, Germany.

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Appendix. Survey locations, distances of transects, sampling dates, number of spot counts, total number of raptors and raptor species for each survey.

PROVINCE/DISTRICT	OBSERVATION GRID	SAMPLING DATE	NUMBER OF SPOT COUNTS	NUMBER OF RAPTORS SPECIES	NUMBER OF RAPTORS	OBSERVATION TYPE	TRANSECT DISTANCE (m)
Edirne-Tekirdag	B2	4 Jan 01		4	70	Line	10 000
Izmir	E1	6 Jan 01	1	1	1	Spot	
Kayseri-Palas	E10	8 Jan 01	5	4	20	Spot	
Izmir-Gediz	E1	21 Jan 01	9	7	19	Spot	
Gaziantep-Karkamis	G12	25 Jan 01	2	1	400	Spot	
Istanbul-Buyukcekmece	B3	26 Jan 01	5	2	2	Spot	
Ankara-Mogan	D7	27 Jan 01		7	11	Line	9000
Izmir-Karaburun	E1	28 Jan 01	1	1	1	Spot	
Bursa-Uludag	C4	10 Feb 01	1	1	2	Spot	
Ankara-Mogan	D7	11 Feb 01		2	2	Line	9000
Ankara	D7	12 Feb 01	1	1	1	Spot	
Ankara-Mogan	D7	12 Feb 01		4	7	Line	9000
Burdur Lake	F5	12 Feb 01	1	0	0	Spot	
Kocaeli-Korfez	C4	15 Feb 01	1	1	1	Spot	
Edirne	B1	17 Feb 01	1	1	20	Spot	
Ankara-Mogan	D7	19 Feb 01		2	4	Line	9000
Kayseri-Palas	E10	25 Feb 01	4	2	5	Spot	
Burdur-Salda, Yarisli	F5	28 Feb 01	2	3	5	Spot	
Hatay-Subasi	G10	2 Mar 01	1	0	0	Spot	
Kayseri	E10	2 Mar 01	1	0	0	Spot	
Kayseri	E10	3 Mar 01	1	1	1	Spot	
Mugla-Bodrum	F2	3 Mar 01	1	0	0	Spot	
Hatay-Samandag	G10	4 Mar 01	1	1	1	Spot	
Hatay-Samandag	G10	4 Mar 01	1	1	1	Spot	
Izmir	E1	4 Mar 01	1	1	1	Spot	
Samsun-Kampus, Golet	B11	4 Mar 01		2	2	Line	2200
Hayay-Subasi	G10	5 Mar 01	1	2	2	Spot	
Mugla-Bodrum	F2	5 Mar 01	1	1	1	Spot	
Corum-Ipekli	C9	6 Mar 01	1	0	0	Spot	
Izmir	E1	6 Mar 01	2	0	0	Spot	
Adana-Akyatan	G10	7 Mar 01	1	6	6	Spot	
Ankara-Eymir	C7	7 Mar 01	1	2	8	Spot	
Ankara-K. hamam	C7	9 Mar 01	1	6	11	Spot	
Hatay-Samandag	G10	9 Mar 01	1	0	0	Spot	
Hatay-Samandag	G10	9 Mar 01	1	0	0	Spot	
Hatay-Samandag	G10	9 Mar 01	1	1	23	Spot	
Istanbul-Cekmeköy	B3	10 Mar 01	1	0	0	Spot	
Istanbul-Cekmeköy	B3	11 Mar 01	1	0	0	Spot	
Kayseri	E10	11 Mar 01	1	1	1	Spot	
Edirne-Tavuk Ormani	B1	17 Mar 01	1	0	0	Spot	
Konya-Kulu	D8	17 Mar 01		1	5	Line	4000
Mugla-Dalyan	G2	17 Mar 01	1	2	5	Spot	
Ankara-Mogan	D7	18 Mar 01		3	15	Line	9000
Ankara-ODTU	D7	18 Mar 01	1	3	4	Spot	
Istanbul-Bosphorus	B3	18 Mar 01	1	11	662	Spot	
Izmir-Gediz	E1	18 Mar 01	1	5	14	Spot	
Kayseri-Erciyes, Sultan Sazligi	E10	18 Mar 01	4	4	13	Spot	
Edirne	B1	24 Mar 01		1	1	Line	3000
Kayseri-Talas	E10	25 Mar 01	1	4	9	Spot	
Istanbul-Kadiköy	C3	29 Mar 01	1	1	7	Spot	
Adana-Tuzla	G10	5 Apr 01	1	2	6	Spot	

Appendix. Continued.

PROVINCE/DISTRICT	OBSERVA- TION GRID	SAMPLING DATE	NUMBER OF SPOT COUNTS	NUMBER OF RAPTOR SPECIES	NUMBER OF RAPTORS	OBSERVA- TION TYPE	TRANSECT DISTANCE (m)
Bursa-Uluabat	C3	7 Apr 01	1	1	1	Spot	
Istanbul-Cekmeköy	B3	7 Apr 01	2	0	0	Spot	
Ankara-Mogan	D7	8 Apr 01		3	15	Line	9000
Ankara-Tuz Lake	D7	8 Apr 01	1	3	103	Spot	
Ankara-Uyuz Lake	D7	8 Apr 01	3	4	29	Spot	
Istanbul-Büyükkada	C3	8 Apr 01	2	0	0	Spot	
Bursa-Uluabat	C3	10 Apr 01	1	1	3	Spot	
Istanbul	B3	11 Apr 01	1	8	396	Spot	
Edirne	B1	14 Apr 01	1	1	1	Spot	
Mugla-Bodrum Güllük	F2	14 Apr 01	5	3	4	Spot	
Ankara-Mogan	D7	15 Apr 01		4	16	Line	9000
Istanbul-Sile	B4	5 May 01	2	0	0	Spot	
Canakkale-Saros	C1	12 May 01		0	0	Line	6000
Canakkale-Gelibolu, Kesan	C1	13 May 01		1	1	Line	10 000
Canakkale-Saros	C1	13 May 01		1	1	Line	6000
Ankara-Mogan	D7	19 May 01		6	9	Line	9000
Istanbul-Bosphorus	B3	19 May 01	1	8	87	Spot	
Sanliurfa-Birecik	F12	19 May 01	1	2	2	Spot	
Ankara-Sungurlu	C9	20 May 01		3	4	Line	9000
Antalya-Belek	G5	20 May 01	4	0	0	Spot	
Antalya-Serik	G6	20 May 01	4	1	1	Spot	
Corum-Hatusas, Alacahoyuk	C9	20 May 01	2	1	3	Spot	
Ankara-ODTU	D7	24 May 01	1	3	3	Spot	
Istanbul-Bahcekoy	B3	25 May 01	1	2	4	Spot	
Konya-Kulu	D8	26 May 01		2	4	Line	4000
Yalova	C4	26 May 01	3	1	1	Spot	
Istanbul-Buyukcekmece	B3	27 May 01	1	2	4	Spot	
Sanliurfa-Birecik	F12	4 Jun 01	1	2	2	Spot	
Sanliurfa-Halfeti	F12	5 Jun 01	1	4	4	Spot	
Bolu	C6	14 Jun 01	1	7	17	Spot	
Mugla-Kavaklidere	G2	14 Jun 01	1	4	6	Spot	
Nigde-Aladaglar	F9	14 Jun 01	1	1	1	Spot	
Bolu-Yedigöller	C6	17 Jun 01		2	2	Line	6000
Edirne-Tavuk Ormani	B1	17 Jun 01	2	2	2	Spot	
Ankara-Bey pazari	C7	19 Jun 01	1	1	8	Spot	
Ankara-Cayirhan-Bey pazari	C7	19 Jun 01		1	1	Line	2500
Istanbul-Terkos	B3	21 Jun 01	2	4	6	Spot	
Ankara-Mogan	D7	24 Jun 01		2	6	Line	9000
Ankara-Mogan	D7	24 Jun 01		2	6	Line	9000
Ankara-ODTU	D7	24 Jun 01	1	0	0	Spot	
Edirne-Egribük	B1	24 Jun 01	1	2	2	Spot	
Konya-Kulu	D8	24 Jun 01		4	9	Line	4000
Sanliurfa-Birecik	F12	24 Jun 01	1	2	3	Spot	
Zonguldak	B6	25 Jun 01		2	5	Line	3000
Sanliurfa-Birecik, Halfeti	F12	29 Jun 01	2	2	4	Spot	
Corum-Harmancik	C9	30 Jun 01	1	2	2	Spot	
Nigde-Aladaglar	F9	30 Jun 01	1	3	4	Spot	
Erzurum Horasan-Kars	C16	3 Jul 01	1	2	9	Spot	
Erzurum-Pasinler	C15	3 Jul 01	1	0	0	Spot	
Kars-Arpacay	C18	3 Jul 01	1	2	3	Spot	
Igdir-Sazlik	D19	4 Jul 01	1	1	20	Spot	

Appendix. Continued.

PROVINCE/DISTRICT	OBSERVA- TION GRID	SAMPLING DATE	NUMBER OF SPOT COUNTS	NUMBER OF RAPTOR SPECIES	NUMBER OF RAPTORS	OBSERVA- TION TYPE	TRANSECT DISTANCE (m)
Kars-Cali Lake	C18	4 Jul 01	1	1	1	Spot	
Kars-Kuyucak	C18	4 Jul 01	1	3	4	Spot	
Mugla; Marmaris-Datca	G2	4 Jul 01		1	2	Line	1000
Kayseri-Derevenk	E10	5 Jul 01	1	1	4	Spot	
Kayseri-Hormetci	E10	5 Jul 01	1	1	1	Spot	
Kayseri-Sakar	E10	5 Jul 01	1	0	0	Spot	
Igdir	D19	6 Jul 01	1	2	2	Spot	
Kayseri-Erciyes, Sultan Sazligi	E10	6 Jul 01	4	3	17	Spot	
Kayseri-Yahyali	E10	6 Jul 01	1	0	0	Spot	
Van	E18	6 Jul 01	1	1	3	Spot	
Bolu-Yedigöller	C6	7 Jul 01		0	0	Line	6000
Kayseri-Engir	E10	7 Jul 01	1	1	2	Spot	
Kayseri-Kizilirmak	E10	7 Jul 01	1	0	0	Spot	
Kayseri-Tuzla	E10	7 Jul 01	1	1	1	Spot	
Kayseri-Yertasin	E10	7 Jul 01	1	1	1	Spot	
Bolu-Yedigöller	C6	8 Jul 01	1	0	0	Spot	
Izmir-Gediz	E1	8 Jul 01	3	1	1	Spot	
Hatay-Subasi	G10	9 Jul 01	1	0	0	Spot	
Trabzon-Sivrikaya	B14	9 Jul 01	1	1	2	Spot	
Antalya	G5	10 Jul 01	2	0	0	Spot	
Kastamonu	B8	14 Jul 01	2	1	2	Spot	
Erzincan-Erzurum	D15	17 Jul 01		3	3	Line	5000
Erzurum-Guneykaya	C16	18 Jul 01	1	4	4	Spot	
Agri-Eleskirt	D18	19 Jul 01	3	4	4	Spot	
Kayseri-Sultan Sazligi	E10	19 Jul 01	4	1	1	Spot	
Van-Catak	E18	20 Jul 01	1	4	4	Spot	
Bursa-Uluabat	C3	21 Jul 01	1	0	0	Spot	
Erzincan-Eksisu	D14	21 Jul 01	1	3	8	Spot	
Van-Golboga Lake	E18	21 Jul 01	1	3	3	Spot	
Ankara-ODTU	D7	22 Jul 01	1	0	0	Spot	
Edirne-Golbaba	B1	22 Jul 01	1	7	9	Spot	
Erzincan-Eksisu	D14	22 Jul 01	1	3	5	Spot	
Erzincan-Firat river	D14	22 Jul 01	2	6	11	Spot	
Erzincan-Firat river	D14	22 Jul 01	1	0	0	Spot	
Erzincan-Mutu	D14	22 Jul 01	1	3	5	Spot	
Rize-Ayder	B15	22 Jul 01	1	2	7	Spot	
Trabzon-Erzurum Yolu	C14	22 Jul 01	2	2	51	Spot	
Bitlis-Tatvan, Ahlat	E17	23 Jul 01	2	5	5	Spot	
Rize-Ayder	B15	23 Jul 01	1	1	1	Spot	
Sanliurfa-Birecik	F12	23 Jul 01	1	1	1	Spot	
Erzincan	D14	24 Jul 01	1	5	16	Spot	
Rize-Ayder	B15	24 Jul 01	1	0	0	Spot	
Sanliurfa-Birecik	F12	24 Jul 01	1	1	1	Spot	
Sanliurfa-Birecik	F12	24 Jul 01	1	1	1	Spot	
Agri-Dogubeyazit	D18	25 Jul 01	1	1	1	Spot	
Bursa-Akcalar	C4	25 Jul 01	1	0	0	Spot	
Erzincan-Isikpinar	D14	25 Jul 01	1	3	4	Spot	
Erzincan	D14	26 Jul 01	1	1	2	Spot	
Antalya-Kemer	G5	27 Jul 01	1	1	1	Spot	
Ankara-ODTU	D7	28 Jul 01	1	0	0	Spot	
Bursa-Uluabat	C3	29 Jul 01	1	1	1	Spot	
Edirne	B1	29 Jul 01		1	1	Line	1000

Appendix. Continued.

PROVINCE/DISTRICT	OBSERVATION GRID	SAMPLING DATE	NUMBER OF SPOT COUNTS	NUMBER OF RAPTOR SPECIES	NUMBER OF RAPTORS	OBSERVATION TYPE	TRANSECT DISTANCE (m)
Edirne	B1	29 Jul 01	1	1	1	Spot	
Kayseri-Derebag	E10	29 Jul 01		1	1	Line	2000
Hatay-Samandag	G10	30 Jul 01	1	1	1	Spot	
Neveshir-Avanos	E9	31 Jul 01	1	3	2	Spot	
Ankara-Mogan	D7	2 Aug 01		3	9	Line	9000
Ankara-Nallihan	C7	3 Aug 01	2	3	5	Spot	
Kayseri-Derebag	E10	3 Aug 01	1	1	1	Spot	
Ankara-Beynam	D7	5 Aug 01	1	4	18	Spot	
Ankara-Mogan	D7	5 Aug 01		5	11	Line	9000
Ankara-Nallihan	C7	5 Aug 01	1	2	4	Spot	
Mugla-Didim	F2	8 Aug 01	1	0	0	Spot	
Mugla-Milas	F2	9 Aug 01	1	0	0	Spot	
Mugla-Bodrum	F2	11 Aug 01	1	0	0	Spot	
Edirne-Uzunköprü	B1	12 Aug 01	1	3	3	Spot	
Balikesir-Manyas	C2	13 Aug 01	2	2	2	Spot	
Balikesir-Manyas	C2	14 Aug 01	1	3	3	Spot	
Mugla-Bodrum	F2	15 Aug 01	1	1	1	Spot	
Bursa-Ulubat	C3	16 Aug 01	2	0	0	Spot	
Kutahya; Bozoyuk-Inonu	D4	17 Aug 01		1	1	Line	1400
Mugla-Bodrum	F2	17 Aug 01	1	0	0	Spot	
Mugla-Dalaman	F2	17 Aug 01	1	1	1	Spot	
Mugla-Marmaris	G2	17 Aug 01	1	0	0	Spot	
Kutahya-Altuntas	D4	18 Aug 01	1	2	6	Spot	
Edirne-Golbaba	B1	19 Aug 01	1	3	5	Spot	
Burdur Lake	F5	21 Aug 01	1	1	1	Spot	
Burdur-Salda	F5	22 Aug 01	1	1	1	Spot	
Burdur-Yarisli	F5	22 Aug 01	1	1	1	Spot	
Ankara-Mogan	D7	24 Aug 01		2	81	Line	9000
Izmir-Ödemis	E2	25 Aug 01	1	1	1	Spot	
Ankara-K. hamam	C7	26 Aug 01	1	1	6	Spot	
Istanbul-Camlica	C3	26 Aug 01	1	2	554	Spot	
Izmir-Aliaga	E1	26 Aug 01	1	0	0	Spot	
Izmir-Ödemis	E2	26 Aug 01	1	1	19	Spot	
Istanbul-Bahcekoy	B3	28 Aug 01	1	0	0	Spot	
Kayseri-Sivas	E10	29 Aug 01		2	19	Line	5000
Konya-Kulu	D8	29 Aug 01		8	19	Line	4000
Sivas-Erzincan	D12	29 Aug 01		2	20	Line	5000
Ankara-ODTU	D7	30 Aug 01	1	5	7	Spot	
Burdur Lake	F5	30 Aug 01	1	0	0	Spot	
Erzurum-Sarikamis	C17	30 Aug 01		0	0	Line	5000
Erzurum-Sarikamis	C17	30 Aug 01	1	1	1	Spot	
Eskisehir-Porsuk	D6	30 Aug 01	1	0	0	Spot	
Kars-Sarikamis	C18	30 Aug 01		0	0	Line	5000
Ankara-K. hamam-Cevreyolu	C7	31 Aug 01	1	3	3	Spot	
Kars	C18	31 Aug 01	4	4	13	Spot	
Agri-Dogubeyazit	D18	1 Sep 01	1	0	0	Spot	
Istanbul-Bahcekoy	B3	6 Sep 01	2	2	13	Spot	
Istanbul-Bahcekoy	B3	7 Sep 01	2	1	7	Spot	
Konya-Kulu	D8	8 Sep 01		3	4	Line	4000
Antalya-Saklikent	G5	14 Sep 01	1	5	7	Spot	
Antalya-Saklikent	G5	15 Sep 01	1	0	0	Spot	

Appendix. Continued.

PROVINCE/DISTRICT	OBSERVATION GRID	SAMPLING DATE	NUMBER OF SPOT COUNTS	NUMBER OF RAPTOR SPECIES	NUMBER OF RAPTORS	OBSERVATION TYPE	TRANSECT DISTANCE (m)
Edirne-Kesan	C1	15 Sep 01	2	2	4	Spot	
Mugla-Bodrum Güllük	F2	15 Sep 01	7	3	3	Spot	
Ankara-Cayirhan	C7	16 Sep 01		1	5	Line	2500
Ankara-Cayirhan	C7	16 Sep 01	1	1	3	Spot	
Antalya-Saklikent	G5	16 Sep 01	1	5	6	Spot	
Bursa-Uluabat	C3	16 Sep 01	8	2	11	Spot	
Edirne-Enez	B1	16 Sep 01	1	3	9	Spot	
Mugla-Bodrum Güllük	F2	16 Sep 01	3	0	0	Spot	
Mersin-Göksu	G7	18 Sep 01	1	1	1	Spot	
Sanliurfa-Birecik-Vadi	F12	19 Sep 01	2	1	1	Spot	
Sanliurfa-Birecik-Fidanlik	F12	21 Sep 01	4	0	0	Spot	
Ankara-Bilkent	D7	22 Sep 01	1	2	4	Spot	
Samsun	B11	22 Sep 01	4	1	1	Spot	
Sanliurfa-Birecik-Halfeti Yolu	F12	22 Sep 01		1	3	Line	1500
Bursa-Uluabat	C3	23 Sep 01	1	6	20	Spot	
Istanbul-Camlica	C3	23 Sep 01	1	0	0	Spot	
Sanliurfa-Birecik-Karkamis	F12	23 Sep 01		1	1	Spot	2000
Istanbul-Bahcekoy	B3	24 Sep 01	2	7	488	Spot	
Istanbul-Bahcekoy	B3	25 Sep 01	2	8	191	Spot	
Hatay-Belen	G11	28 Sep 01	1	7	3539	Spot	
Mugla-Bodrum Güllük	F2	29 Sep 01	3	3	6	Spot	
Mugla-Bodrum Tuzla	F2	29 Sep 01	2	0	0	Spot	
Ankara-Mogan	D7	30 Sep 01		2	4	Line	9000
Konya-Kulu	D8	30 Sep 01		1	1	Line	4000
Ankara-Mogan	D7	1 Oct 01		4	8	Line	9000
Nigde-Aladaglar	F9	1 Oct 01	1	3	4	Spot	
Elazig-Hazar	E14	3 Oct 01	2	5	121	Spot	
Istanbul-Bahcekoy	B3	3 Oct 01	1	7	80	Spot	
Istanbul-Bahcekoy	B3	4 Oct 01	1	1	2	Spot	
Istanbul-Bahcekoy	B3	5 Oct 01	1	4	17	Spot	
Corum	C9	6 Oct 01	1	0	0	Spot	
Izmir-Gediz	E1	6 Oct 01	1	3	3	Spot	
Kayseri-Talas, Sarimsakli	E10	6 Oct 01	2	1	1	Spot	
Ankara-Mogan	D7	7 Oct 01		4	4	Line	9000
Burdur Lake	F5	7 Oct 01	1	0	0	Spot	
Izmir-Aliaga	E1	7 Oct 01	1	2	2	Spot	
Kayseri-Talas, Engir	E10	7 Oct 01	2	0	0	Spot	
Istanbul	B3	10 Oct 01	1	5	439	Spot	
Ankara-K. hamam	C7	13 Oct 01	4	6	48	Spot	
Bursa-Uluabat	C3	13 Oct 01	1	2	2	Spot	
Gumushane-Siran	C14	13 Oct 01		2	2	Line	5000
Konya-Kulu	D8	13 Oct 01		0	0	Line	4000
Samsun-Kurupelit	B11	13 Oct 01		1	1	Line	1500
Ankara-Mogan	D7	14 Oct 01		3	3	Line	9000
Bursa-Uluabat	C3	14 Oct 01	7	1	15	Spot	
Kayseri	E10	14 Oct 01	3	2	9	Spot	
Konya-Kulu	D8	20 Oct 01		3	3	Line	4000
Bursa-Uluabat	C3	21 Oct 01		3	6	Spot	
Ankara-Mogan	D7	27 Oct 01	1	3	6	Line	9000
Konya-Kulu	D8	27 Oct 01		3	3	Line	4000
Ankara-Mogan	D7	28 Oct 01		4	10	Line	9000

Appendix. Continued.

PROVINCE/DISTRICT	OBSERVA- TION GRID	SAMPLING DATE	NUMBER OF SPOT COUNTS	NUMBER OF RAPTOR SPECIES	NUMBER OF RAPTORS	OBSERVA- TION TYPE	TRANSECT DISTANCE (m)
Ankara-Mogan	D7	29 Oct 01		2	2	Line	9000
Konya-Kulu	D8	3 Nov 01		2	3	Line	4000
Ankara-Mogan	D7	1 Dec 01		4	6	Line	9000
Konya-Kulu	D8	1 Dec 01		1	3	Line	4000
Mugla-Bodrum	F2	1 Dec 01	4	4	12	Spot	
Bursa-Uluabat	C3	2 Dec 01	7	5	24	Spot	
Samsun	B11	2 Dec 01	1	1	1	Spot	
Mugla-Bodrum Tuzla	F2	5 Dec 01	2	1	2	Spot	
Konya-Kulu	D8	8 Dec 01		2	2	Line	4000
Ankara-ODTU	D7	10 Dec 01	1	1	1	Spot	
Mugla-Bodrum Güllük	F2	15 Dec 01	1	6	20	Spot	
Konya-Kulu	D8	16 Dec 01		2	2	Line	4000
Mugla-Bodrum Tuzla	F2	16 Dec 01	1	3	18	Spot	
Neveshir-Avanos, Kizilirmak	E9	17 Dec 01		0	0	Line	3000
Neveshir-Kizilirmak Valley	E9	17 Dec 01		3	6	Line	3000
Ankara-Ovacay	D7	18 Dec 01	1	6	11	Spot	
Istanbul-K., B. Cekmece	B3	19 Dec 01	3	4	25	Spot	
Edirne	B1	21 Dec 01	1	1	1	Spot	
Ankara-Mogan	D7	23 Dec 01		4	4	Line	9000
Izmir-Gediz	E1	23 Dec 01	2	5	8	Spot	
Kayseri	E10	23 Dec 01	2	0	0	Spot	
Ankara-Bilkent	D7	24 Dec 01	1	1	1	Spot	
Mugla-Bodrum Tuzla	F2	26 Dec 01	3	1	1	Spot	
Izmir-Aliaga	E1	29 Dec 01	1	1	2	Spot	
Konya-Kulu	D8	29 Dec 01		1	1	Line	4000
Mersin-Kazanli	G7	29 Dec 01	1	1	1	Spot	
Ankara-Mogan	D7	30 Dec 01		4	7	Line	9000
Istanbul-Buyukcekmece	B3	30 Dec 01	3	1	2	Spot	
Kayseri-Engir	E10	30 Dec 01	1	1	1	Spot	
Kayseri-Kizilirmak	E10	30 Dec 01	1	1	1	Spot	
Kayseri-Palas	E10	30 Dec 01	1	1	3	Spot	
Kayseri-Yertasin	E10	30 Dec 01	1	3	4	Spot	
Mugla-Bodrum Güllük	F2	30 Dec 01	3	1	1	Spot	
Mugla-Bodrum Tuzla	F2	30 Dec 01	1	0	0	Spot	
Ankara-K. hamam	C7	31 Dec 01	1	0	0	Spot	
Ankara-Mogan	D7	31 Dec 01		3	15	Line	9000
Mugla-Bodrum	F2	31 Dec 01	2	4	7	Spot	
Bursa-Kampus	C4	1 Jan 02	1	2	6	Spot	
Bursa-Uluabat	C3	1 Jan 02	1	2	6	Spot	
Adana-Karatas	G10	3 Jan 02	3	5	5	Spot	
Mugla-Milas, Tuzla	F2	5 Jan 02	1	6	12	Spot	
Izmir-Gediz	E1	6 Jan 02	1	6	8	Spot	
Mugla-Milas, Güllük	F2	6 Jan 02	1	6	12	Spot	
Istanbul-Kücüksu	C3	10 Jan 02	1	0	0	Spot	
Ankara-Nallihan	C7	12 Jan 02		5	12	Line	2000
Ankara-Nallihan	C7	12 Jan 02	1	4	6	Spot	
Kayseri-Merkez	E10	12 Jan 02	1	1	1	Spot	
Mugla-Milas, Tuzla	F2	12 Jan 02	1	2	4	Spot	
Burdur Lake	F5	13 Jan 02	1	0	0	Spot	
Bursa-Uluabat	C3	13 Jan 02	10	4	40	Spot	
Mugla-Milas, Tuzla	F2	14 Jan 02		1	7	Line	1000

Appendix. Continued.

PROVINCE/DISTRICT	OBSERVATION GRID	SAMPLING DATE	NUMBER OF SPOT COUNTS	NUMBER OF RAPTOR SPECIES	NUMBER OF RAPTORS	OBSERVATION TYPE	TRANSECT DISTANCE (M)
Isparta-Egirdir	F4	19 Jan 02	1	1	1	Spot	
Istanbul-Buyukcekmece	B3	19 Jan 02	1	1	3	Spot	
Mugla-Milas, Tuzla	F2	19 Jan 02	1	2	4	Spot	
Kastamonu-Kure-Varla	B9	20 Jan 02		4	4	Line	2500
Kirklareli-Igneada	B2	20 Jan 02	3	2	11	Spot	
Konya-Ankara	D7	20 Jan 02		4	13	Line	5000
Mugla-Milas, Güllük	F2	20 Jan 02	1	6	15	Spot	
Izmir-Gediz	E1	25 Jan 02	1	6	19	Spot	
Edirne-Merkez	B1	26 Jan 02	2	2	3	Spot	
Izmir-Gediz	E1	26 Jan 02	1	8	51	Spot	
Mugla-Milas, Tuzla	F2	26 Jan 02	2	1	1	Spot	
Bursa-Uluabat	C3	27 Jan 02	9	2	13	Spot	
Izmir-Körfez	E1	27 Jan 02	1	0	0	Spot	
Izmir-Cesme	E1	1 Feb 02	2	4	5	Spot	
Konya-Kulu	D8	1 Feb 02		0	0	Line	4000
Ankara-Bilkent	D7	2 Feb 02	2	0	0	Spot	
Aydin-Azap Lake	F2	2 Feb 02	1	0	0	Spot	
Aydin-B. Menderes	F2	2 Feb 02	1	7	27	Spot	
Aydin-Bafa	F2	2 Feb 02	1	3	11	Spot	
Mugla-Milas, Tuzla	F2	2 Feb 02	4	1	5	Spot	
Sinop	A10	2 Feb 02	2	0	0	Spot	
Sinop-Gerze	B9	2 Feb 02		2	2	Line	10 000
Sinop-Samsun	B10	2 Feb 02		2	12	Line	10 000
Sinop-Sarikum Lake	B10	2 Feb 02	3	5	11	Spot	
Balikesir-Manyas	C2	3 Feb 02	1	3	60	Spot	
Edirne-Merkez	B1	3 Feb 02	3	1	23	Spot	
Istanbul-Terkos	B3	3 Feb 02	8	3	31	Spot	
Kayseri-Engir	E10	3 Feb 02	1	1	3	Spot	
Kayseri-Sarimsakli	E10	3 Feb 02	1	0	0	Spot	
Kayseri-Tuzla	E10	3 Feb 02	1	1	3	Spot	
Kirklareli-Igneada	B2	3 Feb 02	2	3	8	Spot	
Konya-Kulu	D8	3 Feb 02		2	2	Line	4000
Mugla-Milas-Tuzla	F2	3 Feb 02		2	13	Line	1000
Amasya-Yedikir	C10	4 Feb 02	2	2	3	Spot	
Kayseri-Sultan Sazligi	E10	6 Feb 02	1	1	10	Spot	
Ankara-Nallihan	C7	9 Feb 02	1	7	11	Spot	
Edirne-Golbaba	B1	10 Feb 02	2	2	8	Spot	
Ankara-Sögütözü	D7	11 Feb 02	1	1	11	Spot	
Burdur Lake	F5	16 Feb 02	1	0	0	Spot	
Bursa-Kocacay	C3	16 Feb 02	4	3	7	Spot	
Konya-Kulu	D8	16 Feb 02		1	1	Line	4000
Mugla-Milas, Tuzla	F2	16 Feb 02	2	1	2	Spot	
Denizli-Acigol	F4	17 Feb 02	1	0	0	Spot	
Izmir-Gediz	E1	17 Feb 02	1	1	2	Spot	
Adiyaman-Gölbasi	F13	19 Feb 02		0	0	Line	4000
Istanbul-Yedikir	B3	21 Feb 02	3	2	3	Spot	
Konya-Kulu	D8	22 Feb 02		2	2	Line	4000
Mugla-Milas, Mumcular	F2	22 Feb 02		1	1	Line	1200
Ankara-Ovacay	D7	23 Feb 02	3	8	14	Spot	
Mugla-Milas, Tuzla	F2	23 Feb 02		0	0	Line	1000
Mugla-Tuzla	F2	23 Feb 02	2	0	0	Spot	
Ankara-ODTU	D7	25 Feb 02	1	1	1	Spot	

Appendix. Continued.

PROVINCE/DISTRICT	OBSERVA- TION GRID	SAMPLING DATE	NUMBER OF SPOT COUNTS	NUMBER OF RAPTOR SPECIES	NUMBER OF RAPTORS	OBSERVA- TION TYPE	TRANSECT DISTANCE (m)
Samsun-Ladik	B11	25 Feb 02	4	3	5	Spot	
Istanbul-Yedikir	B3	26 Feb 02	4	2	2	Spot	
Burdur Lake	F5	28 Feb 02	3	0	0	Spot	
Samsun-Kizilirmak	B10	28 Feb 02		2	36	Line	2200
Izmir-Gediz	E1	1 Mar 02	7	15	0	Spot	
Ankara-ODTU	D7	2 Mar 02	1	3	6	Spot	
Izmir-Aliaga	E1	2 Mar 02	1	2	2	Spot	
Konya-Kulu	D8	2 Mar 02		2	2	Line	4000
Mugla-Datca	G2	2 Mar 02	1	1	2	Spot	
Ankara-Mogan	D7	3 Mar 02		3	4	Line	9000
Izmir-Gediz	E1	3 Mar 02	1	4	14	Spot	
Mugla-Tuzla	F2	3 Mar 02	3	0	0	Spot	
Istanbul-Belgrad Or.	B3	4 Mar 02	2	1	68	Spot	
Kirklareli-Igneada	B2	7 Mar 02	1	5	169	Spot	
Kayseri-Sazlik, Cayirozu	E10	8 Mar 02	1	2	4	Spot	
Kayseri-Sultan Sazligi, Kanal 2	E10	8 Mar 02		1	2	Line	4000
Kirklareli-Igneada	B2	8 Mar 02	1	1	1	Spot	
Bursa-Kocacay	C3	9 Mar 02	1	4	11	Spot	
Kayseri-S. Sazligi, Ovaciftlik	E10	9 Mar 02		1	2	Line	1500
Kirklareli-Igneada	B2	9 Mar 02	1	1	1	Spot	
Mugla-Milas, Tuzla	F2	9 Mar 02	3	2	2	Spot	
Sakarya-Sapanca	C5	9 Mar 02	2	0	0	Spot	
Ankara-Mogan	D7	10 Mar 02		0	0	Line	9000
Bolu-Aladag	C6	10 Mar 02	1	0	0	Spot	
Denizli-Acigöl	F4	10 Mar 02	1	2	2	Spot	
Kayseri-Hisarçik	E10	10 Mar 02	1	2	2	Spot	
Kayseri-S. Sazligi, Camuz	E10	10 Mar 02		2	2	Line	1000
Kirklareli-Igneada	B2	10 Mar 02	1	0	0	Spot	
Izmir-Konak	E1	15 Mar 02	2	0	0	Spot	
Kayseri-Palas	E10	16 Mar 02	2	1	6	Spot	
Konya-Kulu	D8	16 Mar 02		4	9	Line	4000
Ankara-K. hamam	D7	17 Mar 02	1	7	18	Spot	
Denizli-Acigöl	F4	17 Mar 02	1	4	6	Spot	
Düzce-Efteni	C6	17 Mar 02	1	2	4	Spot	
Kayseri-Sultan Sazligi	E10	17 Mar 02	2	3	5	Spot	
Aksaray	E8	20 Mar 02	1	0	0	Spot	
Aksaray-Eskil	E8	20 Mar 02	1	3	4	Spot	
Kayseri-Derevenk	E10	20 Mar 02	1	0	0	Spot	
Konya-Cihanbeyli	E7	20 Mar 02	1	2	2	Spot	
Konya-Kulu	D8	20 Mar 02		2	3	Line	4000
Ankara-Mogan	D7	23 Mar 02		4	7	Line	9000
Konya-Kulu	D8	23 Mar 02		1	1	Line	4000
Edirne Merkez-Meric	B1	24 Mar 02	1	0	0	Spot	
Izmir-Gediz	E1	24 Mar 02	1	1	1	Spot	
Yalova-Tesvikiye	C4	24 Mar 02	1	0	0	Spot	
Ankara-Beytepe	D7	25 Mar 02		3	3	Line	4000
Kayseri-Palas	E10	25 Mar 02	1	2	6	Spot	
Isparta-Kovada	F4	27 Mar 02	1	4	4	Spot	
Kayseri-Palas	E10	27 Mar 02	1	2	3	Spot	
Mugla-Milas, Tuzla	F2	27 Mar 02	1	2	2	Spot	
Ordu	B12	27 Mar 02		2	2	Line	2000

Appendix. Continued.

PROVINCE/DISTRICT	OBSERVA- TION GRID	SAMPLING DATE	NUMBER OF SPOT COUNTS	NUMBER OF RAPTOR SPECIES	NUMBER OF RAPTORS	OBSERVA- TION TYPE	TRANSECT DISTANCE (m)
Ankara-Mogan	D7	30 Mar 02		5	18	Line	9000
Kayseri-Palas	E10	30 Mar 02	1	2	7	Spot	
Kayseri-Palas, Kizilirmak	E10	30 Mar 02	2	1	2	Spot	
Bilecik-Osmaneli	C5	31 Mar 02	1	3	5	Spot	
Edirne Merkez-Meric	B1	31 Mar 02	1	1	2	Spot	
Izmir-Gediz	E1	31 Mar 02	2	10	27	Spot	
Kayseri-Palas	E10	31 Mar 02	1	2	3	Spot	
Ankara-Mogan	D7	1 Apr 02		2	3	Line	9000
Hatay-Subasi	G10	2 Apr 02	1	8	116	Spot	
Kayseri-Sultan Sazligi	E10	2 Apr 02	1	3	25	Spot	
Bursa-Uluabat	C3	3 Apr 02	1	1	6	Spot	
Hatay-Samandag	G10	3 Apr 02	1	1	2	Spot	
Ordu-Unye	B12	3 Apr 02		2	6	Line	3500
Ankara-ODTU	D7	4 Apr 02	1	1	1	Spot	
Hatay-Subasi	G10	5 Apr 02	1	3	3	Spot	
Ankara-Bilkent	D7	6 Apr 02	2	2	2	Spot	
Ankara-Mogan	D7	6 Apr 02		4	6	Line	9000
Edirne-Golbaba	B1	6 Apr 02	2	5	9	Spot	
Konya-Kulu	D8	6 Apr 02		4	9	Line	4000
Rize-Liman	B15	6 Apr 02	1	0	0	Spot	
Ankara-Bilkent, ODTU	D7	7 Apr 02	2	2	2	Spot	
Ankara-ODTU	D7	7 Apr 02	1	5	5	Spot	
Bursa-Inkaya	C4	7 Apr 02	1	1	1	Spot	
Izmir-Cigli	E1	7 Apr 02	1	4	4	Spot	
Kayseri-Hisarcik	E10	7 Apr 02	1	0	0	Spot	
Yalova-Akköy	C4	7 Apr 02	1	1	1	Spot	
Ankara-Karagol	C7	8 Apr 02	1	2	2	Spot	
Bursa-Inkaya	C4	8 Apr 02	1	0	0	Spot	
Izmir-Cigli	E1	9 Apr 02	1	4	4	Spot	
Afyon-Akdag	E5	11 Apr 02		2	4	Line	5000
Izmir-Bornova	E1	11 Apr 02	1	1	1	Spot	
Ankara-Mogan	D7	13 Apr 02		6	18	Line	9000
Düzce-Efteni	C6	13 Apr 02	1	4	6	Spot	
Izmir-Gediz	E1	13 Apr 02	4	6	19	Spot	
Konya-Kulu	D8	13 Apr 02		3	8	Line	4000
Bursa-Inkaya	C4	14 Apr 02	1	0	0	Spot	
Edirne	B1	14 Apr 02	3	5	9	Spot	
Istanbul-Sariyer	B3	14 Apr 02		5	371	Line	9000
Isparta-Gölcük	F4	16 Apr 02	1	0	0	Spot	
Ankara-Col Lake	D7	20 Apr 02	1	1	3	Spot	
Ankara-Kozanli	D7	20 Apr 02	1	4	10	Spot	
Ankara-Mogan	D7	20 Apr 02		4	10	Line	9000
Ankara-Uyuz Lake	D7	20 Apr 02	1	1	5	Spot	
Ankara-Mogan	D7	21 Apr 02		2	19	Line	9000
Ankara-Nallihan	C7	21 Apr 02	1	6	14	Spot	
Konya-Kulu	D8	21 Apr 02		4	7	Line	4000
Mugla-Gokova	G2	21 Apr 02	1	1	2	Spot	
Rize-Pazar	B15	22 Apr 02	1	6	10	Spot	
Samsun-Kizilirmak	B10	22 Apr 02	1	1	12	Line	2200
Samsun-Yörükler	B11	22 Apr 02	1	3	3	Spot	
Ankara-Bilkent	D7	23 Apr 02	2	1	1	Spot	

Appendix. Continued.

PROVINCE/DISTRICT	OBSERVA- TION GRID	SAMPLING DATE	NUMBER OF SPOT COUNTS	NUMBER OF RAPTOR SPECIES	NUMBER OF RAPTORS	OBSERVA- TION TYPE	TRANSECT DISTANCE (m)
Samsun-Kizilirmak	B10	23 Apr 02		1	3	Line	2200
Samsun	B11	24 Apr 02	1	2	5	Spot	
Ankara-Ilgaz	C8	25 Apr 02	1	1	1	Spot	
Ankara-Isik Dagi	C8	25 Apr 02	1	3	3	Spot	
Ankara-K. hamam, Soguksu	C7	25 Apr 02	1	5	11	Spot	
Antalya-Manavgat	G6	25 Apr 02		3	15	Line	3500
Antalya-Manavgat, Akcay	G6	26 Apr 02		0	0	Line	1000
Antalya-Manavgat, Sahapkopru	G6	26 Apr 02		3	3	Line	1000
Eskisehir-Balikdami	D6	26 Apr 02	1	2	2	Spot	
Eskisehir-Sivrihisar	D6	26 Apr 02	1	5	204	Spot	
Samsun	B11	26 Apr 02	1	4	14	Spot	
Samsun-Baligolu	B11	26 Apr 02	1	2	2	Spot	
Samsun-Incesu	B11	26 Apr 02	2	0	0	Spot	
Samsun-Kurtseyh	B11	26 Apr 02	1	0	0	Spot	
Ankara-Golbasi	D7	27 Apr 02		3	7	Line	5000
Ankara-K. hamam	D7	27 Apr 02	1	4	4	Spot	
Ankara-Mogan	D7	27 Apr 02		3	8	Line	9000
Antalya-Seydisehir	G6	27 Apr 02		3	3	Line	9000
Izmir-Cigli	E1	27 Apr 02	1	3	3	Spot	
Izmir-Gediz	E1	27 Apr 02	1	2	4	Spot	
Konya-Seydisehir	F6	27 Apr 02		2	2	Line	7000
Bursa-Uluabat	C3	28 Apr 02	6	6	80	Spot	
Kars-Susuz	C18	28 Apr 02		4	68	Line	2000
Ardahan-Posof, Georgian Bord.	B17	29 Apr 02		4	4	Line	2000
Kars-Damal	C18	29 Apr 02		1	2	Line	3000
Isparta-Kovali-Egirdir	F4	2 May 02	3	4	49	Spot	
Kayseri-Kumarli	E10	2 May 02	1	0	0	Spot	
Balikesir-Kazdagi	D1	4 May 02	3	0	0	Spot	
Bolu-Mengen	C6	4 May 02		0	0	Line	6000
Bursa-Uluabat-Gölyazi	C3	4 May 02	1	3	3	Spot	
Eskisehir-Balikdami	D6	4 May 02	1	4	55	Spot	
Isparta-Atabey	F4	4 May 02	1	0	0	Spot	
Edirne-Doyran	B1	5 May 02	1	5	12	Spot	
Izmir-Aliaga	E1	5 May 02	3	1	2	Spot	
Sanliurfa-Birecik	F12	6 May 02	1	0	0	Spot	
Ankara-ODTU	D7	9 May 02	1	1	1	Spot	
Isparta-Kizildag	F4	10 May 02	1	2	5	Spot	
Istanbul	B3	10 May 02	4	2	16	Spot	
Adana-Yumurtalik	G10	11 May 02	1	2	2	Spot	
Konya-Kulu	D8	11 May 02		4	7	Line	4000
Samsun-Cernek	B11	11 May 02		4	16	Line	1000
Istanbul-Arboretum	B3	12 May 02	2	0	0	Spot	
Izmir-Gediz	E1	12 May 02	1	1	1	Spot	
Ankara-Cubuk	C8	15 May 02	3	2	6	Spot	
Izmir-Yenifoca	E1	15 May 02	1	2	2	Spot	
Bursa-Uluabat	C3	16 May 02	5	1	3	Spot	
Tunceli-Ovacik, Cöplük	D14	17 May 02		3	63	Line	1000
Ankara-Mogan	D7	18 May 02		2	10	Line	9000
Konya-Kulu	D8	18 May 02		3	5	Line	4000
Istanbul-Büyükkada	C3	19 May 02	2	1	1	Spot	
Ankara-Altinpark	D7	20 May 02	1	0	0	Spot	

Appendix. Continued.

PROVINCE/DISTRICT	OBSERVATION GRID	SAMPLING DATE	NUMBER OF SPOT COUNTS	NUMBER OF RAPTOR SPECIES	NUMBER OF RAPTORS	OBSERVATION TYPE	TRANSECT DISTANCE (m)
Bursa-Uluabat	C3	21 May 02	1	1	1	Spot	
Ankara-ODTU	D7	23 May 02	1	2	3	Spot	
Ankara-Bilkent	D7	24 May 02	2	1	1	Spot	
Antalya-Bogazkent	G5	25 May 02	1	1	1	Spot	
Kocaeli	C4	25 May 02	1	0	0	Spot	
Konya-Kulu	D8	25 May 02		0	0	Line	4000
Ankara-Mogan	D7	26 May 02		2	6	Line	9000
Istanbul-Heybeliada	C3	26 May 02	1	2	3	Spot	
Ankara-Camkoru	C7	1 Jun 02	1	2	7	Line	2500
Artvin-Savsat	B17	6 Jun 02		4	17	Line	7000
Trabzon-Sumela	B14	6 Jun 02	1	0	0	Spot	
Izmir-Incirtali	E1	8 Jun 02	2	0	0	Spot	
Samsun-Kizilirmak	B10	8 Jun 02		3	4	Line	2200
Sivas-Divrigi	D13	8 Jun 02		2	2	Line	5000
Sivas-Divrigi, Degirmentasi	D13	8 Jun 02	2	1	1	Spot	
Sivas-Gölova	D11	8 Jun 02	1	0	0	Spot	
Sivas-Sarkisla	D11	9 Jun 02	1	3	4	Spot	
Sivas-Yildizeli	D12	9 Jun 02	1	2	2	Spot	
Ankara-K. hamam	C7	10 Jun 02	1	3	3	Spot	
Bolu-Gerede	C6	10 Jun 02	1	1	1	Spot	
Tunceli-Munzur	D14	11 Jun 02		2	3	Line	5000
Tunceli-Mercan	D14	12 Jun 02	2	3	6	Spot	
Ankara-Bey pazari	C7	15 Jun 02	1	5	18	Spot	
Ankara-Kurtbogazi	D7	15 Jun 02	1	1	1	Spot	
Konya-Kulu	D8	15 Jun 02		3	7	Line	4000
Bursa-Uluabat	C3	16 Jun 02	2	1	14	Spot	
Denizli-Acigöl	F4	16 Jun 02	1	0	0	Spot	
Ankara-ODTU	D7	20 Jun 02	1	1	3	Spot	
Konya-Kulu	D8	21 Jun 02		3	6	Line	4000
Bursa-Uludag	C4	22 Jun 02	1	1	1	Spot	
Manisa-Spil	E2	22 Jun 02		1	3	Line	2000
Bursa-Uludag	C4	23 Jun 02	2	1	1	Spot	
Corum-Ayarik	C9	28 Jun 02	1	0	0	Spot	
Istanbul-Halkali	B3	28 Jun 02	1	1	1	Spot	
Izmir-Karaburun	E1	29 Jun 02	1	3	5	Spot	
Kayseri-Palas	E10	29 Jun 02	1	2	2	Spot	
Bursa-Kocacay	C3	1 Jul 02	1	2	2	Spot	
Kayseri-Engir	E10	1 Jul 02	1	2	5	Spot	
Kayseri-Palas	E10	1 Jul 02	1	2	5	Spot	
Trabzon-Sivrikaya	B14	3 Jul 02	1	3	4	Spot	
Bolu-Abant	C6	6 Jul 02	1	0	0	Spot	
Canakkale-Bozcaada	C1	6 Jul 02		1	1	Line	5000
Kayseri-Hisarcik	E10	6 Jul 02	1	2	2	Spot	
Bursa-Uluabat	C3	7 Jul 02	2	1	2	Spot	
Mugla; Marmaris-Datca	G2	7 Jul 02		4	8	Line	2000
Yozgat	D9	10 Jul 02		1	1	Line	2000
Artvin-Merkez	B16	13 Jul 02		3	9	Line	9000
Karabuk-Safranbolu	B7	13 Jul 02	3	1	6	Spot	
Tunceli-Ovacik-Gozeler	D14	16 Jul 02	3	1	2	Spot	
Istanbul-Buyukcekmece	B3	27 Jul 02	1	1	1	Spot	
Balikesir-Edremit	D1	3 Aug 02	3	1	1	Spot	
Agri-Ararat	D18	9 Aug 02	2	3	3	Spot	

Appendix. Continued.

PROVINCE/DISTRICT	OBSERVATION GRID	SAMPLING DATE	NUMBER OF SPOT COUNTS	NUMBER OF RAPTOR SPECIES	NUMBER OF RAPTORS	OBSERVATION TYPE	TRANSECT DISTANCE (m)
Mugla-K. Gol	G2	14 Aug 02	1	1	1	Spot	
Balikesir-Kazdagi	D1	15 Aug 02	1	3	14	Spot	
Balikesir-Kocacay	C2	15 Aug 02	2	2	2	Spot	
Mugla-Sarigerme	F2	15 Aug 02	1	0	0	Spot	
Canakkale-Gokceada	C1	17 Aug 02		0	0	Line	4000
Mugla-Kalkan	G2	17 Aug 02	1	0	0	Spot	
Burdur Lake	F5	19 Aug 02	1	0	0	Spot	
Corum-Golyazi	C9	27 Aug 02	1	2	2	Spot	
Bolu-Gerede	C6	30 Aug 02	1	3	9	Spot	
Kastamonu-Pinarbasi	B9	30 Aug 02	1	1	2	Spot	
Kastamonu-Pinarbasi	B9	31 Aug 02	1	6	7	Spot	
Karabuk	B7	1 Sep 02	1	1	2	Spot	
Ankara-K. hamam	C7	2 Sep 02	1	4	13	Spot	
Erzurum-Aydintepe	C16	5 Sep 02	1	1	5	Spot	
Ankara-K. hamam	C7	9 Sep 02	3	7	12	Spot	
Bursa-Nilüfer	C3	9 Sep 02	1	0	0	Spot	
Ankara-ODTU	D7	11 Sep 02	1	6	15	Spot	
Bursa-Kocacay	C3	11 Sep 02	1	3	10	Spot	
Bursa-Nilüfer	C3	11 Sep 02	2	0	0	Spot	
Kayseri-Hisarcik	E10	12 Sep 02	1	0	0	Spot	
Ankara-K. hamam	C7	13 Sep 02	1	4	13	Spot	
Istanbul-Riva	B4	14 Sep 02	2	5	9	Spot	
Edirne-Doyran	B1	15 Sep 02	1	4	4	Spot	
Istanbul-Catalca-Gökceali	B3	16 Sep 02		0	0	Line	2400
Istanbul-Terkos	B3	16 Sep 02	2	8	11	Spot	
Hatay-Subasi	G10	19 Sep 02	1	9	362	Spot	
Hatay-Sinanli	G10	20 Sep 02	1	9	1528	Spot	
Istanbul-Riva	B4	20 Sep 02	2	5	10	Spot	
Istanbul-Buyukcekmece	B3	21 Sep 02	1	0	0	Spot	
Ankara-K. hamam	C7	23 Sep 02	1	5	7	Spot	
Ankara-K. hamam	C7	23 Sep 02	1	5	11	Spot	
Hatay-Subasi	G10	26 Sep 02	1	7	122	Spot	
Tokat-Kaz Lake	C11	26 Sep 02		6	17	Spot	1200
Hatay-Samandag	G10	27 Sep 02	2	3	7	Spot	
Istanbul-Buyukcekmece	B3	27 Sep 02	2	4	6	Spot	
Konya-Kulu	D8	28 Sep 02		3	5	Line	4000
Tokat-Kaz Lake	C11	28 Sep 02		7	12	Spot	1200
Ankara-K. hamam	C7	29 Sep 02	2	7	92	Spot	
Mersin-Kargipinari	G7	29 Sep 02	1	0	0	Spot	
Konya-Kulu	D8	5 Sep 02		3	6	Line	4000
Denizli-Acigöl	F4	6 Oct 02	1	1	3	Spot	
Antalya-Belek	G5	7 Oct 02	1	0	0	Spot	
Izmir-Kampus	E1	8 Oct 02	1	2	2	Spot	
Istanbul-Buyukcekmece	B3	12 Oct 02	1	0	0	Spot	
Ankara-Gudul	C7	13 Oct 02	1	3	4	Spot	
Istanbul-Buyukcekmece	B3	13 Oct 02	1	0	0	Spot	
Istanbul-Catalca	B3	13 Oct 02	2	2	101	Spot	
Istanbul-Terkos	B3	13 Oct 02	1	7	13	Spot	
Ankara-K. hamam	C7	14 Oct 02		1	9	Line	10 000
Istanbul-Maslak	B3	14 Oct 02	1	0	0	Spot	
Mus	E16	18 Oct 02	3	2	14	Spot	

Appendix. Continued.

PROVINCE/DISTRICT	OBSERVATION GRID	SAMPLING DATE	NUMBER OF SPOT COUNTS	NUMBER OF RAPTOR SPECIES	NUMBER OF RAPTORS	OBSERVATION TYPE	TRANSECT DISTANCE (m)
Bingol-Karliova	D15	19 Oct 02		2	27	Line	2000
Mus-Bulanik	E16	19 Oct 02	2	1	1	Spot	
Ankara-Mogan	D7	20 Oct 02		5	14	Line	9000
Sanliurfa-Ceylanpinar	G14	20 Oct 02	6	6	137	Spot	
Nigde-Aladaglar	F9	29 Oct 02	4	3	8	Spot	
Ardahan-Hanak	C17	12 Nov 02		4	4	Line	4500
Ardahan-Posof	B17	13 Nov 02		2	4	Line	7000
Ardahan-Posof	B17	14 Nov 02		1	2	Line	5000
Kars	C18	15 Nov 02	1	1	1	Line	2000
Kars	C18	15 Nov 02		0	0	Line	6000
Kars-Selim	C18	15 Nov 02	1	4	5	Spot	
Izmir-Inciralti	E1	16 Nov 02	2	0	0	Spot	
Kars-Sarikamis	C18	16 Nov 02	2	2	3	Spot	
Ankara-Mogan	D7	17 Nov 02		4	4	Line	9000
Erzurum-Hasankeyf	D15	17 Nov 02		1	1	Line	5000
Erzurum-Pasinler	C15	17 Nov 02	1	0	0	Line	3000
Izmir-Gediz	E1	17 Nov 02	2	5	5	Spot	
Kayseri-Sultan Sazligi	E10	20 Nov 02	3	4	4	Spot	
Sanliurfa-Birecik	F12	21 Nov 02	1	0	0	Spot	
Samsun-19 Mayıs	B11	23 Nov 02	1	0	0	Spot	
Samsun-Atakum	B11	24 Nov 02	1	0	0	Spot	
Izmir-Aliaga	E1	30 Nov 02	1	5	5	Spot	
Samsun-Dogupark, Mert	B11	30 Nov 02	2	0	0	Spot	
Tunceli-Ovacik	D14	30 Nov 02		1	1	Line	5000
Kirsehir-Seyfe	D9	30 Nov 02		3	9	Line	2500
Kirsehir-Seyfe	D9	30 Nov 02		3	4	Line	1500
Izmir-Cakalburnu	E1	1 Dec 02	1	0	0	Spot	
Izmir-Gediz	E1	1 Dec 02	1	6	8	Spot	
Sanliurfa-Birecik	F12	1 Dec 02	1	0	0	Spot	
K Maras-Andirin	E11	2 Dec 02		2	2	Line	2000
K Maras-Andirin	E11	3 Dec 02		1	1	Line	5000
Ankara-Nallihan	C7	5 Dec 02	1	2	2	Spot	
Ankara-Nallihan, Sariyar	C7	6 Dec 02	1	0	0	Spot	
Ankara-Kazan, Ovacay	C7	7 Dec 02	2	4	6	Spot	
Samsun-Kizilirmak	B10	7 Dec 02	1	3	15	Line	2200
Konya-Kulu	D8	10 Dec 02		4	7	Line	4000
Konya-Kulu	D8	11 Dec 02		2	4	Line	4000
Ankara-Bilkent	D7	21 Dec 02	2	2	2	Spot	
Edirne-Doyran	B1	21 Dec 02	2	3	33	Spot	
Istanbul-K. Cekmece	B3	21 Dec 02	2	1	1	Spot	
Samsun-Dogupark	B11	21 Dec 02	1	0	0	Spot	
Samsun-Kizilirmak	B10	22 Dec 02		4	26	Line	2200
Izmir-Gediz	E1	29 Dec 02	1	8	12	Spot	
Samsun-Atakum	B11	29 Dec 02		0	0	Line	6000
Balikesir-Ayvalik	D1	30 Dec 02	3	3	11	Spot	
Izmir-Gediz	E1	31 Dec 02	6	0	0	Spot	

N = 499

 $\bar{x} = 1.47$

N = 162

 $\bar{x} = 5097.5$