Chinese Birds 2011, 2(4):193–199
DOI 10.5122/cbirds.2011.0027

SHORT COMMUNICATION

Food habits and prey spectrum of Spotted Owlet (*Athene brama*) in Madurai District, Tamil Nadu, southern India

Ramachandran SANTHANAKRISHNAN ✉, **Abdul Hameed MOHAMED SAMSOOR ALI** *, **Uthirapathi ANBARASAN**

Department of Zoology, Saraswathi Narayanan College, **Perungudi, Madurai – 625 022, Tamil Nadu, India**

Abstract We studied the food habits and prey spectrum of the Spotted Owlet (*Athene brama*) in Madurai District, Tamil Nadu, southern India, between 2007 and 2009 by analyzing their regurgitated pellets. A total of 4181 pellets were analyzed and 40278 individual prey remains of 16 prey species recorded. The number of prey items per pellet varied from 1 to 31 with an overall mean prey of 9.6 ± 3.03. Our analysis revealed that invertebrates were the predominant prey (insecta 83.0%; arachnida 1.1%; myriapoda 0.2%) followed by vertebrates (reptiles 3.3%; mammals 2.9%). Mammalian prey species in the diet included *Mus* spp., *Rattus rattus*, *Suncus murinus*, *Tatera indica*, *Bandicota bengalensis* and micro chiropteran bats.

Keywords Spotted Owlet, food, invertebrates, Coleoptera, vertebrates

Introduction

Owls play an important role in the maintenance of a natural balance since they are at the apex of trophic levels in terrestrial and aquatic ecosystems (Sergio et al., 2008). Owls are known for their important role in bio-control of pests (Lenton, 1983; Kumar, 1985; Santhanakrishnan, 1987, 1995; Naranthiran, 1989; Neelanarayanan et al., 1994, 1995; Pande and Dahanukar, 2011a, 2011b). Among the various species of owls found in India, the Spotted Owlet (*Athene brama* Temminck, 1821) is the most common small-sized owl in southern India (Ali and Ripley, 1983). The Spotted Owlet is a generalist predator that feeds on diverse prey such as rodents, small birds, reptiles, amphibians and invertebrates such as insects and annelids (Jain and Advani, 1984; Kumar, 1985; Jadhav and Parasharya, 2003; Pande et al., 2004, 2007). Previous studies on the prey of Spotted Owlet have been reported from northern and western India. We discuss here the food and prey spectrum of the Spotted Owlet in Madurai District, Tamil Nadu, southern India.

Received 17 October 2011; accepted 20 November 2011

✉ Author for correspondence (**Ramachandran Santhanakrishnan**)
E-mail: **rskbarno**wl@yahoo.co.in

*Abdul Hameed Mohamed Samsoor Ali
Present Address: Division of Environmental Impact Assessment, Sálim Ali Centre for Ornithology and Natural History (SACON), Anaikatty, Coimbatore – 641 108, Tamil Nadu, India

Study area

Our study was carried out in Madurai District (9°30′N, 77°28′E), Tamil Nadu, southern India between 2007 and 2009. Paddy is the predominantly cultivated crop in the study area; other crops such as sugarcane, banana, jasmine, betlevine, groundnut and sorghum are also cultivated in different regions of the study area. The mean monthly maximum temperature during the study period is 33.6°C (range 29.1–36.9°C) and the mean monthly minimum temperature 22.8°C (range 19.7–25.1°C). The study area receives rainfall during October and December with an annual average of 850 mm.

Methods

During the study period, we observed the food habits of the Spotted Owlets by collecting and analyzing their regurgitated pellets from their roosting and nesting sites. Spotted Owlet pellets were collected fortnightly in six dif-

ferent roosting/nesting sites. Fresh pellets were collected separately during each visit and packed in polythene bags along with tags indicating the site, name and date of collection before being brought to the laboratory. Pellets were kept at 70°C in a hot air oven for 24 hours to kill any associated invertebrates. The length and width of the pellets were measured by using a Vernier caliper (to nearest mm) and the weight was measured with a digital balance with an accuracy of 1 mg. Pellets were analyzed following the method of Schueler (1972) and Yalden (2003).

Mammalian prey items were identified up to species level by comparing their bony remains (e.g., skulls, mandibles) with museum specimens collected from the same study area. Reptiles were identified by their skulls and mandibles (Naranthiran, 1989). Invertebrate prey items were identified up to order level on the basis of undigested anatomical pieces such heads, mandibles, wings, legs, stings and body rings (Naranthiran, 1989; Yalden, 2003; Asokan et al., 2009). Data are presented as mean ± SD.

Results

Pellets

The fresh pellets of owls were compact and dark in color because they contained masses of undigested material, mostly insects; in contrast, the old pellets were pale in color and held loosely. Intact pellets were classified into three sizes *viz*., large, medium and small (Fig. 1) and measured 26.3 ± 0.29 mm in length (n = 4181; range 18.0–46.0 mm), 13.8 ± 0.16 mm in width (n = 4181; range 10.0–26.0 mm) and weighed 0.50 ± 0.16 g (n = 275; range 0.10–1.74 g).

Fig. 1 Various shapes and sizes of Spotted Owlet pellets recorded in the study area

Prey composition

In all pellets, insects representing the order Coleoptera were predominant and represented in 91.3% of the pellets, followed by Orthoptera (80.8%), Hemiptera (27.0%), Diptera (14.8%) and Lepidoptera (13.3%). Among vertebrates, reptilian remains were found only in 27.2%, followed by *Mus* spp. (15.7%) (Table 1).

A total of 40278 individual prey items were obtained from 4181 pellets in the study area between 2007 and 2009. The number of prey items per pellet ranged from 1 to 31 with an overall mean of 9.6 ± 3.03. Invertebrates were the most common prey, representing 84.8% of the total diet, followed by vertebrates (6.2%). Among invertebrates, insects accounted for 83.5% of all individual prey (Table 2) with Coleoptera and Orthoptera species being the most frequent items (41.9% and 33.2%, respectively).

Spotted Owlets consume a narrow spectrum of vertebrate prey, consisting only of reptiles and mammals in their diet (3.3% and 2.8%, respectively), although mammalian prey consisted of five rodent species and an unidentified bat (Table 2).

Temporal variations in prey

Seasonal variation During the three years we studied the diet of the Spotted Owlets, a total of 9018 prey items were identified from post-monsoon seasons, 10957 during summers, 13092 from pre-monsoon seasons and 7211 during the monsoons. Invertebrates were the most common prey during all seasons which were at their maximum in the post-monsoon seasons. Among invertebrates, insect formed always the largest amount of prey consumed in all seasons, accounting for 83.4%. Among insects, Coleoptera

Table 1 Comparative statistics for different prey items found in pellets of the Spotted Owlet (n = 4181) in the study area during 2007–2009

Prey items	Frequency of occurrence of prey items	Percent frequency of occurrence of prey items (%)	Range	Sum
Invertebrates				
Coleoptera	3821	91.3	1–14	16858
Orthoptera	3377	80.8	1–16	13356
Hemiptera	1125	27.0	1–6	1396
Diptera	618	14.8	1–4	704
Hymenoptera	607	14.5	1–5	700
Lepidoptera	560	13.3	1–3	618
Arachnida (Scorpions)	438	10.4	1–2	443
Myriapoda (Millipedes)	25	0.6	1–5	67
Vertebrates				
Reptiles	1139	27.2	1–2	1345
Bats	14	0.3	1–2	15
Mus spp.	656	15.7	1–2	678
Rattus rattus	193	4.7	1–2	201
Tatera indica	53	1.2	1–2	54
Bandicota bengalensis	47	1.2	1–2	50
Suncus murinus	154	3.7	1–2	157

Table 2 Overall frequency and proportions of various prey items in the pellets of Spotted Owlets during 2007–2009 (n = 4181).

Prey species	Frequency of occurrence	Percentage of occurrence (%)
Invertebrates		
Class: Insecta		
Order: Coleoptera	16858	41.9
Order: Orthoptera	13356	33.2
Order: Hemiptera	1396	3.5
Order: Diptera	704	1.8
Order: Hymenoptera	700	1.7
Order: Lepidoptera	618	1.5
Class: Arachnida		
Order: Scorpionida	443	1.1
Class: Myriapoda		
Order: Diplopoda	67	0.2
Vertebrates		
Class: Reptilia	1345	3.3
Class: Mammalia		
Order: Micro Chiroptera	15	0.04
Order: Rodentia		
Mus spp.	678	1.7
Rattus rattus	201	0.5
Tatera indica	54	0.1
Bandicota bengalensis	50	0.1
Order: Insectivora		
Suncus murinus	157	0.4
Unidentified prey items	3636	9.0
Total	40278	100.0

species were the most commonly consumed prey and in similar proportions during all seasons. Reptiles and mammals constituted over 4% of all individual prey during all seasons (Table 3).

Yearly variation During each of the three years invertebrates were the dominant prey items in the diet of Spotted Owlets among which insects were the most numerous (Table 4). Among insects, Coleoptera species constituted virtually a stable proportion of prey in every year.

Mammalian prey size

Spotted Owlets consumed prey species with a wide range of weight classes, ranging from 1 g (insects) to > 80 g (mammals). The weight of the mammalian prey items captured by the Spotted Owlet ranged from 5 g (*Mus* spp.) to 84 g (*Rattus rattus*). Among the various prey weight classes, the Spotted Owlet consumed mammalian prey mostly in the 1–20 g (68.1%) weight class, followed by the 20–40 g (19.8%) class. The other prey weight classes of > 40 g accounted for 12.11% (Table 5).

Discussion

In Pakistan, Beg et al. (1990) classified the regurgitated pellets into three size levels: large, medium and small. We followed the same categorization in pellet size in the present study. The size and shape of the pellets usually depend

Table 3 Seasonal variations in the frequency and proportion of various prey items in the pellets of the Spotted Owlet during 2007–2009

Prey species	Post-monsoon (Jan–Mar)		Summer (Apr–Jun)		Pre-monsoon (Jul–Sep)		Monsoon (Oct–Nov)	
	n	%	*n*	%	*n*	%	*n*	%
Invertebrates								
Class: Insecta								
Order: Coleoptera	3881	43.0	4559	41.6	5386	41.1	3032	42.0
Order: Orthoptera	2960	32.8	571	32.6	4362	33.3	2463	34.1
Order: Hemiptera	287	3.2	408	3.7	466	3.6	235	3.3
Order: Diptera	161	1.8	216	2.0	252	1.9	75	1.0
Order: Hymenoptera	132	1.5	205	1.9	266	2.0	97	1.4
Order: Lepidoptera	135	1.5	189	1.7	203	1.5	91	1.3
Class: Arachnida								
Order: Scorpionida	111	1.2	124	1.1	151	1.2	57	0.8
Class: Myriapoda								
Order: Diplopoda	67	0.7	–	–	–	–	–	–
Vertebrates								
Class: Reptilia	306	3.4	377	3.4	442	3.4	220	3.1
Class: Mammalia								
Order: Micro Chiroptera	6	0.1	6	0.1	3	0.02	–	–
Order: Rodentia								
Mus spp.	157	1.7	205	1.9	212	1.6	104	1.4
Rattus rattus	53	0.6	60	0.6	61	0.5	27	0.4
Tatera indica	5	0.1	29	0.3	18	0.1	2	0.03
Bandicota bengalensis	9	0.1	16	0.2	20	0.2	5	0.05
Order: Insectivora								
Suncus murinus	26	0.3	45	0.4	59	0.5	27	0.4
Unidentified prey items	722	8.0	947	8.5	1191	9.1	776	10.8
Total prey items	9018		10957		13092		7211	
Number of pellets	940		1147		1319		775	
Mean prey per pellet	9.6 ± 2.86 (Range: 2–22)		9.6 ± 3.02 (Range: 1–22)		9.9 ± 3.07 (Range: 4–31)		9.3 ± 3.16 (Range: 4–21)	

upon the size and the quantity of undigested materials found from the prey. The average measurements of the pellet sizes reported in other studies (Pande et al., 2004; Tariq et al., 2003) are different from our findings, which might be due to more insects per pellet.

The mean number of prey items per pellet in our study was 9.6 ± 3.03 (range: 1–31). Naranthiran (1989) once reported a mean number of 11.6 prey items in Tamil Nadu and Pande et al. (2007) registered a mean number of 6.9 prey items in Maharashtra. In contrast, Mahmood-ul-Hassan (2007) reported a mean number of only 1.6 prey items at Pakistan. Variations in the number of prey items per pellet is usually affected by a number factors such as size of the prey available, surface activity of prey, how hungry the owls are, the nutritional value and biomass of the prey, prey selection or prey diversity in an area (Santhanakrishnan, 1995). If the prey size is large (> 20 g) the number of prey items per pellet may decrease; inversely, it may increase when the prey is very small (< 1 g insects).

Irrespective of the year and season, invertebrates were the most common prey in the diet of Spotted Owlets. Our results were similar to those documented for the Spotted Owlet in India (Jain and Advani, 1984; Kumar, 1985; Naranthiran, 1989; Jadhav and Parasharya, 2003; Pande et al., 2004, 2007) and Pakistan (Beg et al., 1990; Shah et al., 2004; Mahmood-ul-Hassan et al., 2007).

Among insect preys, Coleoptera were the species consumed in the largest amounts by the Spotted Owlet in our study area. Several previous studies also identified Coleoptera species as one of the most important food sources for this owl species (Jain and Advani, 1984; Kumar, 1985; Jadhav and Parasharya, 2003; Pande et al., 2004). Although we recorded a considerable amount of appendages, elytra, mandibles and heads of various species of beetles in

Table 4 Yearly variations in the frequency and proportion of various prey items in the pellets of the Spotted Owlet during 2007–2009

Prey species	2007		2008		2009	
	n	%	*n*	%	*N*	%
Invertebrates						
Class: Insecta						
Order: Coleoptera	1868	41.6	7991	42.4	6999	41.3
Order: Orthoptera	1397	31.1	6412	34.0	5547	32.7
Order: Hemiptera	143	3.2	605	3.2	648	3.8
Order: Diptera	54	1.2	286	1.5	364	2.2
Order: Hymenoptera	35	0.8	283	1.5	382	2.3
Order: Lepidoptera	45	1.0	259	1.4	314	1.9
Class: Arachnida						
Order: Scorpionida	23	0.5	190	1.0	230	1.4
Class: Myriapoda						
Order: Diplopoda	–	–	–	–	67	0.4
Vertebrates						
Class: Reptilia	149	3.3	640	3.4	556	3.3
Class: Mammalia						
Order: Micro Chiroptera	–	–	–	–	15	0.1
Order: Rodentia						
Mus spp.	54	1.2	357	1.9	267	1.6
Rattus rattus	16	0.4	89	0.5	96	0.6
Tatera indica	–	–	24	0.1	30	0.2
Bandicota bengalensis	–	–	17	0.1	33	0.2
Order: Insectivora						
Suncus murinus	38	0.9	51	0.3	68	0.4
Unidentified prey items	665	14.8	1638	8.7	1333	7.9
Total prey items	4487		18842		16949	
Number of pellets	590		1967		1624	
Mean prey per pellet	7.6 ± 2.03 (Range: 3–20)		9.6 ± 3.19 (Range: 3–31)		10.4 ± 2.78 (Range: 1–22)	

Table 5 Relative occurrence of various mammalian weight classes in the diet of Spotted Owlets during 2007–2009

Weight class (g)	*Mus* spp.		*R. rattus*		*T. indica*		*B. bengalensis*		*S. murinus*		Total	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
1–20	678	100	43	21.3	20	37.0	4	8.0	32	20.3	777	68.1
20–40	–	–	67	33.3	29	53.7	8	16.0	121	77.1	225	19.8
40–60	–	–	74	36.9	4	7.4	33	66.0	4	2.6	115	10.1
60–80	–	–	13	6.5	1	1.9	5	10.0	–	–	19	1.7
80–100	–	–	4	2.0	–	–	–	–	–	–	4	0.3
Total	678		201		54		50		157		1140	

the pellets, we could only identify this up to the order level due to the paucity of proper methods and guides for identification. Tariq et al. (2003), Shah et al. (2004) and Mahmood-ul-Hassan et al. (2007) reported that Coleoptera are also the most common insects consumed by Spotted Owlets in Pakistan. After Coleoptera, Orthoptera species also formed important insect prey. Kumar (1985) recorded that Orthoptera species accounted for 72% of all individual prey taken by Spotted Owlets and Naranthiran (1989) 67%. A number of other studies have also recorded the occurrence of Orthoptera species in the diet of this owl (Ali and Ripley, 1983; Jain and Advani, 1984; Jadhav and Parasharya, 2003; Pande et al., 2004). In our study area, Coleoptera and Orthoptera species were frequently

recorded in agricultural fields and most often attracted to sources of light during night hours. On many occasions Spotted Owlets were observed on electric power lines feeding on these insects which are usually attracted by light. Those insects that were taken in negligent proportions possibly constituted a supplementary prey resource or may have been captured by chance or availability. In Madurai, Spotted Owlets also consumed scorpions. Similarly, Kumar (1985) and Pande et al. (2004, 2007) found scorpions in the diet of this owl species.

Consumption of reptiles by Spotted Owlets in Madurai was comparable to that documented for the species in India (Jadhav and Parasharya, 2003; Pande et al., 2007) and Pakistan (Shah et al., 2004; Mahmood-ul-Hassan et al., 2007). Reptilian prey remains have also been commonly recorded in the food habits of other owl species in India (Verzhutskii and Ramanujam, 2002; Srinivasulu and Srinivasulu, 2007).

Composition of small mammal prey in the diet of Spotted Owlets in Madurai was similar to results obtained by other authors in India (Jain and Advani, 1984; Kumar, 1985; Naranthiran, 1989; Pande et al., 2004). Recent studies at Maharashtra, India, detected 11 species of rodents in the diet of the Spotted Owlet (Pande et al., 2007). Mahmood-ul-Hassan et al. (2007) found five species of rodents, with *Mus* spp. accounting for > 20% of all prey items in the diet of the Spotted Owlet in Pakistan. The frequent occurrence of mice, rats and shrews in the pellets of the Spotted Owlet suggest that the owlets hunt around human settlements as well as in agricultural areas.

In Madurai, we found that size of the mammalian prey consumed by Spotted Owlets ranged from 5 g (*Mus* spp.) to 84 g (*Rattus rattus*), but over 68% of the prey were in the 0–20 g weight class. Mahmood-ul-Hassan et al. (2007) reported that the average weight of mammalian prey caught by Spotted Owlets in Central Punjab, Pakistan, varied between 5 g (*Suncus etruscus*) and 131 g (*Tatera indica*). Pande et al. (2007) reported that the approximate mean biomass of mammalian prey in the diet of the Spotted Owlet in Maharashtra, India, ranged from 2 g (*Suncus etruscus*) to 75 g (*Golunda ellioti*). From the present study it is evident that the Spotted Owlet forages on a wide variety of prey species, available in and around human habitations and agricultural areas. The presence of bats in the diet of the Spotted Owlet indicates that they perform aerial hunting too. The food habits of the Spotted Owlet show a stereotypic pattern in the consumption of various prey species among seasons and years, suggesting that they forage opportunistically. Further studies on the prey availability estimation of various species in the habitat of this owl may yield more information on prey selection.

Acknowledgements As authors we are thankful to the Ministry of Environment and Forests, Government of India, for providing financial support for this study. We are grateful to the Principal and Management of Saraswathi Narayanan College (Autonomous), Madurai, for facilities and encouragement. We are thankful to Mr. P. Muthukumar, Field Assistant, for accompanying us during field trips.

References

Ali S, Ripley SD. 1983. Handbook of Birds of India and Pakistan. Oxford University Press, Bombay.

Asokan S, Ali AMS, Manikannan R. 2009. Diet of three insectivorous birds in Nagapattinam District, Tamil Nadu, India – a preliminary study. J Threat Taxa, 1(6):327–330.

Beg MA, Maqbool M, Mushtaq-ul-Hassan M. 1990. Food habits of the Spotted Owlet, *Athene brama*. Pakistan J Agric Sci, 27(2):127–131.

Jadhav A, Parasharya BM. 2003. Some observations on the nesting behaviour and food of the Spotted Owlet *Athene brama*. Zoos' Print J, 18(8):1163–1165.

Jain P, Advani R. 1984. Winter food of Spotted Owlet *Athene brama indica*. J Bombay Nat Hist Soc, 80(2):415–416.

Kumar TS. 1985. The Life History of the Spotted Owlet (*Athene brama brama*, Temminck) in Andhra Pradesh. Raptor Research Centre, Hyderabad, India.

Lenton GM. 1983. Wise owls flourish among their oil palms. New Sci, 17:436–437.

Mahmood-ul-Hassan M, Beg MA, Mushtaq-ul-Hassan M, Rana SA. 2007. Food habits of the spotted owlet *Athene brama* in central Punjab, Pakistan. Acta Zool Sin, 53(1):64–68.

Naranthiran G. 1989. Ecology of Southern Spotted Owlet *Athene brama brama* (Temminck) in Thanjavur District, Tamil Nadu with special reference to its food habit and ecotoxicity. M.Phil Thesis. Bharathidasan University, Thiruchirappalli, India.

Neelanarayanan P, Nagarajan R, Kanakasabai R. 1994. Vertebrate pests as prey and their composition in the diet of Common Barn Owl (*Tyto alba*). Rodent Newslet, 18(3):5–6.

Neelanarayanan P, Nagarajan R, Kanakasabai R. 1995. The Common Barn Owl (*Tyto alba*) a potential predator of rodent pests. Pestology, 19(9):34–37.

Pande S, Pawashe A, Bastawade DB, Kulkarni PP. 2004. Scorpions and molluscs: Some new dietary records for Spotted Owlet *Athene brama* in India. Newslet Ornithol, 1(5):68–70.

Pande S, Pawashe A, Murlidhar MN, Joglekar C, Mahabal A. 2007. Effect of food and habitat on breeding success in Spotted Owlets (*Athene brama*) nesting in villages and rural landscapes in India. J Raptor Res, 41(1):26–34.

Pande S, Dahanukar N. 2011a. Breeding biology, nesting habitat, and diet of the Rock Eagle-Owl (*Bubo bengalensis*). J Raptor Res, 45(3):211–219.

Pande S, Dahanukar N. 2011b. The diet of Indian Eagle Owl *Bubo bengalensis* and its agronomic significance. J Threat Taxa, 3(8):2011–2017.

Santhanakrishnan R. 1987. Studies on population, food habits and nesting of Barn Owl, *Tyto alba* (Scopoli) in a portion of Cauvery river basin. M.Phil Thesis. Bharathidasan University, Thiruchirappalli, India.

Santhanakrishnan R. 1995. Ecology of Barn Owl, *Tyto alba* (Scopoli) with special reference to its population, feeding and breeding in Mayiladuthurai, Tamil Nadu, South India. Ph.D Thesis. Bharathidasan University, Thiruchirappalli, India.

Schueler FW. 1972. A new method of preparing owls pellets boiling in NaOH. Bird Banding, 43:142.

Sergio F, Caro T, Brown D, Clucas B, Hunter J, Ketchum J, McHugh K, Hiraldo F. 2008. Top predators as conservation tools: ecological rationale, assumptions and efficacy. Annu Rev Ecol Evol Syst, 39:1–19.

Shah ZA, Beg MA, Khan AA. 2004. Prey preferences of the Spotted Little Owl (*Athene brama*) in the croplands near Faisalabad-Pakistan. Int J Agric Biol, 6(2):278–280.

Srinivasulu B, Srinivasulu C. 2007. Diet of Short-Eared Owl *Asio flammeus* (Pontopiddan, 1763) wintering in Rollapadu Wildlife Sanctuary and its vicinity in Andhra Pradesh, India. Zoos' Print J, 22(9):2829–2831.

Tariq SA, Ghazi RR, Nisa N. 2003. Study on the food of Spotted Owlet (*Athene brama*) at an Agricultural Farm Gharo, Lower Sindh, Pakistan. J Nat Hist Wildl, 2(1):31–33.

Verzhutskii B, Ramanujam MC. 2002. On the prey of the Collared Scops Owl *Otus bakkamoena* (Pennant) at Auroville, Pondicherry. Zoos' Print J, 17(11):939–940.

Yalden DW. 2003. The Analysis of Owl Pellets. The Mammal Society, London.

印度泰米尔纳德邦马杜赖地区横斑腹小鸮(*Athene brama*)的食性及猎物谱

Ramachandran SANTHANAKRISHNAN, Abdul Hameed MOHAMED SAMSOOR ALI, Uthirapathi ANBARASAN

(Department of Zoology, Saraswathi Narayanan College, **Perungudi, Madurai – 625 022, Tamil Nadu, India)**

摘要：我们于 2007 年至 2009 年通过食丸分析研究了印度泰米尔纳德邦马杜赖地区横斑腹小鸮（*Athene brama*）的食性及猎物谱。共分析了食丸 4181 个，记录了共 16 种猎物的 40278 个残余物。每个食丸中的猎物种类为 1–31 个，平均 9.6 ± 3.03 个。分析表明，该地区横斑腹小鸮的主要猎物为无脊椎动物（昆虫类占 83.0%，蛛形类占 1.1%，多足类占 0.2%），其次为脊椎动物（爬行类占 3.3%，哺乳类占 2.9%）。哺乳类猎物主要包括各种小家鼠（*Mus* spp.）、黑家鼠（*Rattus rattus*）、臭鼩鼱（*Suncus murinus*）、印度沙鼠（*Tatera* ***indica***）、小板齿鼠（*Bandicota bengalensis*）及小型翼手类动物。

关键词：横斑腹小鸮，食物，无脊椎动物，鞘翅目昆虫，脊椎动物