

The vertebrate fauna along the Hantangang (river) of Korea

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Before the construction of Hantangang dam, we surveyed vertebrate fauna along the Hantangang River and collected samples. We collected 248 specimens (1,394 individuals) of 41 fish species from 10 families in four orders, including 17 endemic species and 5 endangered species. In our herpetofauna survey, we collected 47 amphibian samples of 10 species from 5 families in 2 orders, and 19 reptile samples of 5 species from 2 families in 1 order. We observed 25 species of bird (6 orders, 14 families) including collection of 51 bird specimens (10 species from 5 families in 1 order). We collected 91 mammals of 6 species, and identified 7 species from field sign and direct observation from a total of 10 families in 5 orders. This collection and list comprise the final vertebrate faunal survey of the Hantangang region, and will provide basic scientific information for future research on conservation and restoration of the region.

Keywords: amphibians, birds, fauna, fishes, Hantangang, mammals, reptiles

INTRODUCTION

Habitat fragmentation or reduction by anthropogenic disturbance has been globally regarded as a main cause of extinction (Van Dyke, 2008). Building dams may have direct and indirect effects on local fauna (McCully, 2001). Since World War II and Korean War, wildlife habitats on the Korean peninsula have been drastically altered (Won and Smith, 1999). Even though the armistice of the Korean War was made in 1953, there have been several skirmishes between Republic of Korea and Democratic People's Republic of Korea. Due to threats of heavy water flow by North Korea and flood control, Hantangang dam was planned to be built despite the surrounding environmental issues. The Hantangang River headwaters are in Pyeonggang-gun, Gangwon-do, North Korea, and the river flows through Gangwon-do and Gyeonggi-do (Fig. 1) and volcanic plateau covers most of the riparian area (Won *et al.*, 2010). Even though the river is a type locality for Hanta virus found in Striped Field Mouse (*Apodemus agrarius*) from Hantangang population (Johnson, 2001), the fauna of this river has not been undergone scientific survey. Dam construction commenced in 2007, and was scheduled for completion in 2015, at which point 14.6 km² of riparian habitat were expected to be submerged by a lake, and consequent microclimate changes were predicted.

Relatively large vertebrate species are regarded as charismatic animals, and therefore, these taxa have been appreciated as umbrella species for ecosystem (Van Dyke,

2008). Since every toxon survey can be carried out due to economic issue, vertebrate faunal survey has to be prior to other taxa (Tucker, 2005).

We surveyed the area's vertebrate fauna prior to the alteration of riparian habitat along the Hantangang River and collected vertebrate specimens. This would be the last faunal investigation along the Hantangang River. We ascertain that this survey list and collections can provide scientific information for conservation and restoration of the region.

METHODS AND MATERIALS

Fishes

We caught fishes along Hantangang in Cheorwon-gun, Yeoncheon-gun and Pocheon-si from April, July, October and November in 2008.

We used kick nets or cast nets for collecting fishes, and the fishes were immediately fixed with 10% formalin solution in the field, and preserved in 75% ethyl alcohol solution for long-term preservation (NIBR, 2007). All specimens collected for this research were registered and deposited in the National Institute of Biological Resources, Korea.

The species are listed alphabetically within the families, which have been arranged according to Nelson (2006). Scientific names are generally those of Kim *et al.* (2005) with some modification by recent taxonomic works.

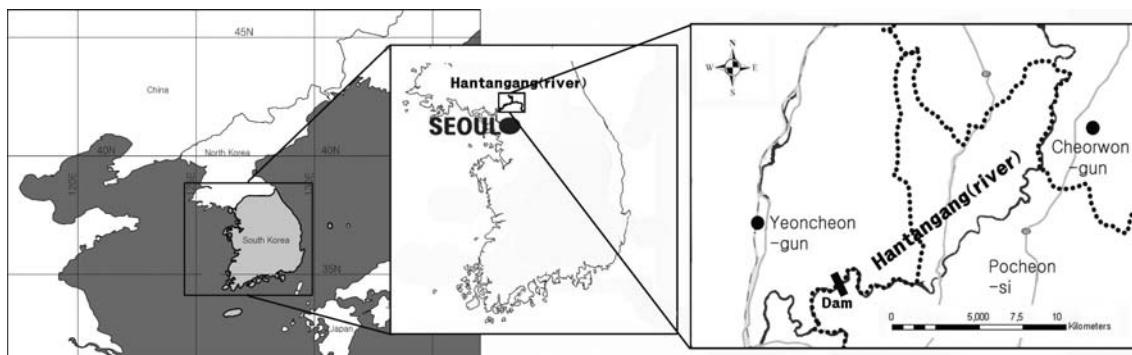


Fig. 1. Maps denoting Hantangang (river) where the survey were done.

Amphibians and reptiles

For this herpetofauna survey, we caught amphibians and reptiles from March to October 2008 along Hantangang of Cheorwon-gun, Yeoncheon-gun and Pocheon-si. Kick net, hand net and snake tongs were used for collecting amphibians and reptiles. Collected samples were immediately fixed with 10% formalin solution or 70-80% ethyl alcohol solution in the field and preserved in 75% ethyl alcohol solution for long-term preservation. We followed NIBR protocol for making specimens (NIBR, 2007). All specimens collected for this survey were registered and deposited in the National Institute of Biological Resources, Korea.

Birds

We investigated avian fauna in riparian vegetation, river banks, creeks and shrub communities along Hangtangang (Yeoncheon-gun and Pocheon-si) using mist nets on February, May and October of 2008. Mist nets (height 2.6 m × length 12 m, 4 strata) were made of nylon with a mesh size of 36 mm. While mist nets were set up, we observed bird directly through binoculars.

Collected birds were kept below -20°C and made as study skins according to NIBR protocol (NIBR, 2007). All specimens collected for this research were registered and deposited in the National Institute of Biological Resources, Korea.

Mammals

For mammal collection, we selected trapping sites according to possibility of approach and submergence by dam. We caught small mammals in March, June and October of 2008 and set ≥ 10 to 30 traps in grid or linear system for 5 successive nights. We used kill traps (Victor professional rat trap) and live traps (Sherman live trap) for this collection, and baited traps with peanut butter (Jones *et al.*, 1996).

All samples, except those from the last day of trapping,

were skinned and prepared as study skin in the field on each trapping day according to NIBR protocol (NIBR, 2007). The samples caught on the final trapping day were kept in a cooler with ice and prepared as study skins in the laboratory in one week.

We got permissions for this collection by local government and the Han River Watershed Management Office.

RESULTS AND DISCUSSION

Fishes

Along the Hantangang, we collected and identified 248 specimens (1,394 individuals) of 41 species from 10 families in 4 orders (Table 1). As 186 specimens were collected from 28 species, the family Cyprinidae was the most abundant taxon, followed by Cobitidae (22 specimens of 4 species), Centropomidae (8 specimens of 2 species), Odontobutidae (11 specimens of 1 species), Balitoridae (7 specimens of 1 species), Bagridae (3 specimens of 1 species), Amblycipitidae (1 specimen of 1 species), Siluridae (1 specimen of 1 species) and Cottidae (1 specimen of 1 species).

According to order level, Cypriniformes has 3 families, 34 species, 215 specimens followed by Perciformes (3 families, 4 species, 26 specimens), Siluriformes (3 families, 3 species, 5 specimens) and Scorpaeniformes (1 family, 1 species, 1 specimen).

We identified 17 species from 6 families of endemic fish in Korea. The endemic collection includes *Acheilognathus signifier*, *A. yamatsutae*, *Coreoleuciscus splendidus*, *Gobiobotia brevibarba*, *G. macrocephala*, *Microphysogobio longidorsalis*, *M. yaluensis*, *Pseudopungtungia tenuicorpora*, *Rhodeus uyekii*, *Squalidus gracilis majimae*, *Zacco koreanus*, *Iksookimia koreensis*, *Koreocobitis rotundicaudata*, *Psudobagrus koreanus*, *Liobagrus andersoni*, *Coreoperca herzi* and *Odontobutis interrupta*.

We found 5 endangered species designated by Ministry of Environment (*Acheilognathus signifier*, *Gobiobotia*

Table 1. List of fish collection.

Order	Family	Species	No. of specimens	Remark
Cypriniformes	Cyprinidae	<i>Abbottina rivularis</i>	4	—
		<i>Acheilognathus signifier</i>	1	Endemic, Endangered
		<i>Acheilognathus koreensis</i>	2	—
		<i>Acheilognathus lanceolatus</i>	5	—
		<i>Acheilognathus rhombeus</i>	7	—
		<i>Acheilognathus yamatsutae</i>	4	Endemic
		<i>Aphyocyparis chinensis</i>	1	—
		<i>Carassius auratus</i>	9	—
		<i>Coreoleuciscus splendidus</i>	17	Endemic
		<i>Cyprinus carpio</i>	1	—
		<i>Gobiobotia brevibarba</i>	2	Endemic, Endangered
		<i>Gobiobotia macrocephalus</i>	1	Endemic, Endangered
		<i>Hemibarbus labeo</i>	5	—
		<i>Hemibarbus longirostris</i>	6	Endemic
		<i>Ladislavia taczanowski</i>	3	—
		<i>Microphysogobio longidorsalis</i>	3	—
		<i>Microphysogobio yaluensis</i>	8	Endemic
		<i>Pseudogobio esocinus</i>	12	—
		<i>Pseudorasbora parva</i>	6	—
		<i>Pseudopungtungia tenuicorpus</i>	2	Endemic, Endangered
		<i>Pungtungia herzi</i>	21	—
		<i>Rhodeus uyekii</i>	2	Endemic
		<i>Rhynchocypris oxycephalus</i>	13	—
		<i>Rhynchocypris steindachneri</i>	4	—
		<i>Sarcocheilichthys varieatus</i>	2	—
		<i>Squalidus gracilis</i>	3	Endemic
		<i>Zacco koreanus</i>	18	Endemic
		<i>Zacco platypus</i>	24	—
	Balitoridae	<i>Orthrias nudus</i>	7	—
	Cobitidae	<i>Iksookimia koreensis</i>	12	Endemic
		<i>Misgurnus anguillicaudatus</i>	6	—
		<i>Misgurnus mizolepis</i>	3	—
		<i>Koreocobitis rotundicaudata</i>	2	Endemic
Siluriformes	Bagridae	<i>Pseudobagrus koreanus</i>	3	Endemic
	Amblycipitidae	<i>Liobagrus andersoni</i>	1	Endemic
	Siluridae	<i>Silurus asotus</i>	1	—
Scorpaeniformes	Cottidae	<i>Cottus koreanus</i>	1	Endangered
Perciformes	Centropomidae	<i>Siniperca scherzeri</i>	2	—
		<i>Coreoperca herzi</i>	6	Endemic
	Odontobutidae	<i>Odontobutis interrupta</i>	11	Endemic
	Gobiidae	<i>Rhinogobius brunneus</i>	7	—
4 orders	10 families	41 species	248	—

brevibarba, *G. macrocephala*, *Pseudopungtungia tenuicorpa*, *Cottus koreanus*).

In 2000, there was fish survey around Hantangang for Nature Environment Survey by the Ministry of Environment. The result of the previous survey shows 35 fish species along Hantangang (Chae and Yoon, 2000). The deference between two surveys might be cause by the

number of field work. While field work was done two times for the survey in 2000, we did it four times.

Amphibians and Retiles

We collected 47 specimens (2 orders, 5 families, 10 species) of amphibians around Hantangan and adjacent

Table 2. List of herpetofauna.

Class	Order	Family	Species	No. of specimens
Amphibia	Caudata	Hynobiidae	<i>Hynobius leechii</i>	4
			<i>Onychodactylus fischeri</i>	6
	Anura	Bufonidae	<i>Bufo gargarizans</i>	3
			<i>Bufo stejnegeri</i>	4
		Bombinatoridae	<i>Bombina orientalis</i>	5
		Hylidae	<i>Hyla japonica</i>	5
		Ranidae	<i>Pelophylax nigromaculatus</i>	12
			<i>Glandirana emeljanovi</i>	2
			<i>Rana dybowskii</i>	15
			<i>Rana huanrenensis</i>	1
Reptilia	Pholidota	Colubridae	<i>Amphiesma vibakari</i>	1
			<i>Elaphe dione</i>	5
		Viperidae	<i>Elaphe rufodorsata</i>	2
			<i>Rhabdophis tigrinus</i>	4
			<i>Gloydius ussuriensis</i>	7
2 classes	3 orders	7 families	15 species	66 specimens

Table 3. List of birds along Hantangang.

Order	Family	Species	No. of specimens	No. of individuals observed
Anseriformes	Anatidae	<i>Anser albifrons</i>	—	850
		<i>Anas crecca</i>	—	2
		<i>Anas platyrhynchos</i>	—	54
		<i>Anas poecilorhyncha</i>	—	68
Falconiformes	Accipitridae	<i>Aegypius monachus</i>	—	4
		<i>Buteo buteo</i>	—	1
Charadriiformes	Charadriidae	<i>Charadrius dubius</i>	—	1
	Scolopacidae	<i>Actitis hypoleucos</i>	—	1
Columbiformes	Columbidae	<i>Streptopelia orientalis</i>	—	1
Piciformes	Picidae	<i>Dendrocopos kizuki</i>	—	1
Passeriformes	Motacillidae	<i>Motacilla grandis</i>	—	1
	Pycnonotidae	<i>Microrhynchus amaurotis</i>	1	2
	Turdidae	<i>Phoenicurus auroreus</i>	7	3
	Sylviidae	<i>Urosphena squameiceps</i>	1	
		<i>Phylloscopus inornatus</i>	1	
	Aegithalidae	<i>Aegithalos caudatus</i>	—	6
	Paridae	<i>Parus palustris</i>	3	5
		<i>Parus major</i>	7	2
	Emberizidae	<i>Emberiza tristrami</i>	1	
		<i>Emberiza rustica</i>	1	8
		<i>Emberiza elegans</i>	27	1
		<i>Emberiza spodocephala</i>	2	
	Corvidae	<i>Garrulus glandarius</i>	—	2
		<i>Pica pica</i>	—	28
		<i>Corvus macrorhynchos</i>	—	4
6 order	14 families	25 species	51 specimens	

area including montane creeks (Table 2). We also caught, 19 specimens (1 order, 2 families, 5 species) of reptiles.

In the amphibian collection, we identified 4 individuals of Korean salamander *Hynobius leechii*, 6 Long-tailed

Table 4. List of mammals along Hantangang.

Order	Family	Species	No. of specimen	Remark
Lagomorpha	Leporidae	<i>Lepus coreanus</i>	—	Field sign
Soricomorpha	Soricidae	<i>Crocidura lasiura</i>	9	
	Talpidae	<i>Mogera wogura</i>	—	Field sign
Carnivora	Felidae	<i>Prionailurus bengalensis</i>	—	Field sign, Endangered II
	Canidae	<i>Nyctereutes procyonoides</i>	1	
	Mustelidae	<i>Lutra lutra</i> <i>Mustela sibirica</i>	— —	Field sign, Endangered I Direct sight
Artiodactyla	Suidae	<i>Sus scrofa</i>	—	Field sign
	Cervidae	<i>Hydropotes inermis</i>	2	
Rodentia	Sciuridae	<i>Sciurus vulgaris</i> <i>Tamias sibiricus</i>	— 1	Direct sight
	Muridae	<i>Apodemus agrarius</i>	73	
		<i>Mus musculus</i>	4	
5 orders	10 families	13 species	90	

Clawed Salamander *Onychodactylus fischeri*, 3 Asiatic toad *Bufo gargarizans*, 4 Korean water toad *Bufo stejnegeri*, 5 Oriental Fire-bellied Toad *Bombina orientalis*, 5 Japanese tree frog *Hyla japonica*, 12 black-spotted frog *Pelophylax nigromaculatus*, 2 Imienpo Station frog *Glandirana emeljanovi*, 15 Dybowski's frog *Rana dybowskii* and 1 Huanren frog *Rana huanrenensis*.

For the reptile survey, we collected 1 Asian keelback *Amphiesma vibakari*, 5 Dione Ratsnake *Elaphe dione*, 2 Red-backed Ratsnake *Elaphe rufodorsata*, 4 tiger keelback *Rhabdophis tigrinus* and 7 Ussuri mamushi *Gloydius ussuriensis*.

This amphians result shows much abundant than previous survey in 2000. The amphibian survey in 2000 shows that 5 species of amphibians were identified around the research site (Han *et al.*, 2000). Unlike amphibian, the number of reptile found is same in both surveys. This result might be caused by extensive field survey focusing on riparian habitats. While this survey was done along riparian habitats, previous national survey was focused on montane habitats.

Birds

We collected 51 bird specimens (1 order, 5 families, 10 species) and identified 25 species of birds around Hantangang (Table 3). Yellow-throated bunting *Emberiza elegans* ($n=27$) was the most abundant collected species followed by Daurian redstart *Phoenicurus auroreus* ($n=7$), great tit *Parus major* ($n=7$), marsh tit *Parus palustris* ($n=3$), black-faced bunting *Emberiza spodocephala* ($n=2$) and 1 specimen each of brown eared bulbul *Micrornis amaurotis*, yellow-browed warbler *Phylloscopus inornatus*, rustic bunting *Emberiza rustica*, Asian stubtail

Urosphena squameiceps and Tristram's bunting *Emberiza tristrami*.

Through field observations, we've seen 850 of white-fronted geese *Anser albifrons*, followed by spot-billed duck *Anas poecilorhyncha* (68) and mallard *Anas platyrhynchos* (54).

For bird trapping, mist net is one the most general methods but it is limited for lower flying birds and species prefer shrub habitats (Bub, 1991). It's necessary to use various methods for identifying more bird species.

Mammals

Along the riparian habitat and river banks of Hantangang, 4 species of small mammals were caught; the Ussuri white-toothed shrew *Crocidura lasiura*, Siberian chipmunk *Tamias sibiricus*, striped field mouse *Apodemus agrarius* and house mouse *Mus musculus*. We also collected dead bodies of raccoon dog (*Nyctereutes procyonoides*) and water deer (*Hydropotes inermis*) around Hantangang (Table 4). Finally, we identified lesser Japanese mole *Mogera wogura*, Eurasian otter *Lutra lutra*, Siberian weasel *Mustela sibirica*, leopard cat *Prionailurus bengalensis*, wild boar *Sus scrofa*, red squirrel *Sciurus vulgaris* and Korean hare *Lepus coreanus* by field sign and direct observation. We listed a total of 13 species from 10 families (Table 4).

During spring season trapping among the kill traps, there has been 5 loss of mouse after capture. It might be caused by predator or scavenger species. Also, there has been some damage on the skin of sample caught by kill traps. For getting nice collection, we recommend a live trap protected by outside.

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Appendix 1. Collection list of fish.

Collection no.	Family	Genus	Species	Korean name	Date	Collector
NIBR-P2470	COBITIDAE	<i>Iksookimia</i>	<i>koreensis</i>	참종개	2008-04-23	BJ Kim, SM Kweon
NIBR-P2471	BALITORIDAE	<i>Orthrias</i>	<i>nudus</i>	대륙종개	2008-04-23	BJ Kim, SM Kweon
NIBR-P2472	CYPRINIDAE	<i>Zacco</i>	<i>koreanus</i>	참갈겨니	2008-04-23	BJ Kim, SM Kweon
NIBR-P2473	CYPRINIDAE	<i>Rhynchocyparis</i>	<i>oxycephalus</i>	버들치	2008-04-23	BJ Kim, SM Kweon
NIBR-P2474	CYPRINIDAE	<i>Rhynchocyparis</i>	<i>steindachneri</i>	버들개	2008-04-23	BJ Kim, SM Kweon
NIBR-P2475	COBITIDAE	<i>Misgurnus</i>	<i>anguillicaudatus</i>	미꾸리	2008-04-23	BJ Kim, SM Kweon
NIBR-P2476	CYPRINIDAE	<i>Microphysogobio</i>	<i>longidorsalis</i>	배가사리	2008-04-23	BJ Kim, SM Kweon
NIBR-P2477	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-04-23	BJ Kim, SM Kweon
NIBR-P2478	CYPRINIDAE	<i>Microphysogobio</i>	<i>yaluensis</i>	돌마자	2008-04-23	BJ Kim, SM Kweon
NIBR-P2479	CYPRINIDAE	<i>Microphysogobio</i>	<i>yaluensis</i>	돌마자	2008-04-23	BJ Kim, SM Kweon
NIBR-P2480	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-04-23	BJ Kim, SM Kweon
NIBR-P2481	CYPRINIDAE	<i>Pseudogobio</i>	<i>esocinus</i>	모래무지	2008-04-23	BJ Kim, SM Kweon
NIBR-P2482	SILURIDAE	<i>Silurus</i>	<i>asotus</i>	메기	2008-04-23	BJ Kim, SM Kweon
NIBR-P2483	GOBIIDAE	<i>Rhinogobius</i>	<i>brunneus</i>	밀어	2008-04-23	BJ Kim, SM Kweon
NIBR-P2484	ODONTOBUTIDAE	<i>Odontobutis</i>	<i>interrupta</i>	얼룩동사리	2008-04-23	BJ Kim, SM Kweon
NIBR-P2485	AMBLYCIPITIDAE	<i>Liobagrus</i>	<i>andersoni</i>	통가리	2008-04-23	BJ Kim, SM Kweon
NIBR-P2486	CYPRINIDAE	<i>Acheilognathus</i>	<i>koreensis</i>	칼납자루	2008-04-23	BJ Kim, SM Kweon
NIBR-P2487	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-04-23	BJ Kim, SM Kweon
NIBR-P2488	CENTROPOMIDAE	<i>Siniperca</i>	<i>scherzeri</i>	쏘가리	2008-04-23	BJ Kim, SM Kweon
NIBR-P2489	CYPRINIDAE	<i>Pseudogobio</i>	<i>esocinus</i>	모래무지	2008-04-23	BJ Kim, SM Kweon
NIBR-P2490	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-04-23	BJ Kim, SM Kweon
NIBR-P2491	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-04-23	BJ Kim, SM Kweon
NIBR-P2492	CYPRINIDAE	<i>Sarcocheilichthys</i>	<i>varieatus</i>	참중고기	2008-04-23	BJ Kim, SM Kweon
NIBR-P2493	COBITIDAE	<i>Misgurnus</i>	<i>anguillicaudatus</i>	미꾸리	2008-04-24	BJ Kim
NIBR-P2494	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-04-24	BJ Kim
NIBR-P2495	CYPRINIDAE	<i>Gobiobotia</i>	<i>brevibarba</i>	돌상어	2008-04-24	BJ Kim
NIBR-P2496	CYPRINIDAE	<i>Hemibarbus</i>	<i>labeo</i>	누치	2008-04-24	BJ Kim
NIBR-P2497	CYPRINIDAE	<i>Carassius</i>	<i>auratus</i>	붕어	2008-04-24	BJ Kim
NIBR-P2498	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-04-24	BJ Kim
NIBR-P2499	COBITIDAE	<i>Misgurnus</i>	<i>anguillicaudatus</i>	미꾸리	2008-04-24	BJ Kim
NIBR-P2500	BALITORIDAE	<i>Orthrias</i>	<i>nudus</i>	대륙종개	2008-04-24	BJ Kim
NIBR-P2501	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-04-24	BJ Kim
NIBR-P2502	COBITIDAE	<i>Iksookimia</i>	<i>koreensis</i>	참종개	2008-04-24	BJ Kim
NIBR-P2503	CYPRINIDAE	<i>Abbottina</i>	<i>rivularis</i>	버들매치	2008-04-24	BJ Kim
NIBR-P2504	CYPRINIDAE	<i>Pseudorasbora</i>	<i>parva</i>	참붕어	2008-04-24	BJ Kim
NIBR-P2505	CYPRINIDAE	<i>Acheilognathus</i>	<i>koreensis</i>	칼납자루	2008-04-24	BJ Kim
NIBR-P2506	CYPRINIDAE	<i>Ladislavia</i>	<i>taczanowski</i>	새미	2008-04-24	BJ Kim
NIBR-P2507	CYPRINIDAE	<i>Zacco</i>	<i>koreanus</i>	참갈겨니	2008-04-24	BJ Kim
NIBR-P2508	CYPRINIDAE	<i>Rhynchocyparis</i>	<i>oxycephalus</i>	버들치	2008-04-24	BJ Kim
NIBR-P2509	COBITIDAE	<i>Iksookimia</i>	<i>koreensis</i>	참종개	2008-04-24	BJ Kim
NIBR-P2510	CYPRINIDAE	<i>Pseudorasbora</i>	<i>parva</i>	참붕어	2008-04-24	BJ Kim
NIBR-P2511	BALITORIDAE	<i>Orthrias</i>	<i>nudus</i>	대륙종개	2008-04-24	BJ Kim
NIBR-P2512	CYPRINIDAE	<i>Rhynchocyparis</i>	<i>oxycephalus</i>	버들치	2008-04-24	BJ Kim
NIBR-P2513	CYPRINIDAE	<i>Ladislavia</i>	<i>taczanowski</i>	새미	2008-04-24	BJ Kim
NIBR-P2514	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-04-24	BJ Kim
NIBR-P2515	CYPRINIDAE	<i>Zacco</i>	<i>koreanus</i>	참갈겨니	2008-04-25	BJ Kim
NIBR-P2516	CYPRINIDAE	<i>Rhynchocyparis</i>	<i>steindachneri</i>	버들개	2008-04-25	BJ Kim
NIBR-P2517	CYPRINIDAE	<i>Pseudorasbora</i>	<i>parva</i>	참붕어	2008-04-25	BJ Kim
NIBR-P2518	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-04-25	BJ Kim
NIBR-P2519	CYPRINIDAE	<i>Carassius</i>	<i>auratus</i>	붕어	2008-04-25	BJ Kim
NIBR-P2520	BALITORIDAE	<i>Orthrias</i>	<i>nudus</i>	대륙종개	2008-04-25	BJ Kim
NIBR-P2521	COBITIDAE	<i>Misgurnus</i>	<i>anguillicaudatus</i>	미꾸리	2008-04-25	BJ Kim
NIBR-P2522	COBITIDAE	<i>Misgurnus</i>	<i>mizolepis</i>	미꾸라지	2008-04-25	BJ Kim
NIBR-P2523	CYPRINIDAE	<i>Rhynchocyparis</i>	<i>oxycephalus</i>	버들치	2008-04-25	BJ Kim
NIBR-P2805	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-07-23	BJ Kim, SM Kweon
NIBR-P2806	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-07-23	BJ Kim, SM Kweon
NIBR-P2807	CYPRINIDAE	<i>Abbottina</i>	<i>rivularis</i>	버들매치	2008-07-23	BJ Kim, SM Kweon
NIBR-P2808	CYPRINIDAE	<i>Microphysogobio</i>	<i>yaluensis</i>	돌마자	2008-07-23	BJ Kim, SM Kweon
NIBR-P2809	CYPRINIDAE	<i>Pseudogobio</i>	<i>esocinus</i>	모래무지	2008-07-23	BJ Kim, SM Kweon
NIBR-P2810	CYPRINIDAE	<i>Hemibarbus</i>	<i>longirostris</i>	참마자	2008-07-23	BJ Kim, SM Kweon
NIBR-P2811	CYPRINIDAE	<i>Carassius</i>	<i>auratus</i>	붕어	2008-07-23	BJ Kim, SM Kweon

Appendix 1. Continued.

Collection no.	Family	Genus	Species	Korean name	Date	Collector
NIBR-P2812	CYPRINIDAE	<i>Rhynchocypris</i>	<i>oxycephalus</i>	버들치	2008-07-23	BJ Kim, SM Kweon
NIBR-P2813	CYPRINIDAE	<i>Squalidus</i>	<i>gracilis</i>	긴풀개	2008-07-23	BJ Kim, SM Kweon
NIBR-P2814	BALITORIDAE	<i>Orthrias</i>	<i>nudus</i>	대륙종개	2008-07-23	BJ Kim, SM Kweon
NIBR-P2815	ODONTOBUTIDAE	<i>Odontobutis</i>	<i>interrupta</i>	얼룩동사리	2008-07-23	BJ Kim, SM Kweon
NIBR-P2816	CYPRINIDAE	<i>Zacco</i>	<i>koreanus</i>	참갈겨니	2008-07-23	BJ Kim, SM Kweon
NIBR-P2817	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-07-23	BJ Kim, SM Kweon
NIBR-P2818	CYPRINIDAE	<i>Zacco</i>	<i>koreanus</i>	참갈겨니	2008-07-23	BJ Kim, SM Kweon
NIBR-P2819	CYPRINIDAE	<i>Hemibarbus</i>	<i>labeo</i>	누치	2008-07-23	BJ Kim, SM Kweon
NIBR-P2820	CYPRINIDAE	<i>Acheilognathus</i>	<i>yamatsutae</i>	줄납자루	2008-07-23	BJ Kim, SM Kweon
NIBR-P2821	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-07-23	BJ Kim, SM Kweon
NIBR-P2822	CYPRINIDAE	<i>Pseudogobio</i>	<i>esocinus</i>	모래무지	2008-07-23	BJ Kim, SM Kweon
NIBR-P2823	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-07-23	BJ Kim, SM Kweon
NIBR-P2824	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	가는돌고기	2008-07-23	BJ Kim, SM Kweon
NIBR-P2825	CENTROPOMIDAE	<i>Siniperca</i>	<i>scherzeri</i>	쏘가리	2008-07-23	BJ Kim, SM Kweon
NIBR-P2826	CYPRINIDAE	<i>Microphysogobio</i>	<i>longidorsalis</i>	배가사리	2008-07-23	BJ Kim, SM Kweon
NIBR-P2827	CYPRINIDAE	<i>Microphysogobio</i>	<i>yaluensis</i>	돌마자	2008-07-23	BJ Kim, SM Kweon
NIBR-P2828	CYPRINIDAE	<i>Acheilognathus</i>	<i>rhombeus</i>	남지리	2008-07-23	BJ Kim, SM Kweon
NIBR-P2829	CYPRINIDAE	<i>Acheilognathus</i>		남자루속	2008-07-23	BJ Kim, SM Kweon
NIBR-P3192	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-07-24	BJ Kim, SM Kweon, SK Lee
NIBR-P3193	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-07-24	BJ Kim, SM Kweon, SK Lee
NIBR-P3194	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-07-24	BJ Kim, SM Kweon, SK Lee
NIBR-P3344	CYPRINIDAE	<i>Pseudogobio</i>	<i>esocinus</i>	모래무지	2008-10-06	BJ Kim
NIBR-P3345	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-10-06	BJ Kim
NIBR-P3346	CYPRINIDAE	<i>Zacco</i>	<i>koreanus</i>	참갈겨니	2008-10-06	BJ Kim
NIBR-P3347	GOBIIDAE	<i>Rhinogobius</i>	<i>brunneus</i>	밀어	2008-10-06	BJ Kim
NIBR-P3348	CYPRINIDAE	<i>Squalidus</i>	<i>gracilis</i>	긴풀개	2008-10-06	BJ Kim
NIBR-P3349	COBITIDAE	<i>Iksookimia</i>	<i>koreensis</i>	참종개	2008-10-06	BJ Kim
NIBR-P3350	CYPRINIDAE	<i>Rhynchocypris</i>	<i>oxycephalus</i>	버들치	2008-10-06	BJ Kim
NIBR-P3351	CYPRINIDAE	<i>Microphysogobio</i>	<i>yaluensis</i>	돌마자	2008-10-06	BJ Kim
NIBR-P3352	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-10-06	BJ Kim
NIBR-P3353	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-10-06	BJ Kim
NIBR-P3354	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-10-06	BJ Kim
NIBR-P3355	CYPRINIDAE	<i>Hemibarbus</i>	<i>longirostris</i>	참마자	2008-10-06	BJ Kim
NIBR-P3356	BALITORIDAE	<i>Orthrias</i>	<i>nudus</i>	대륙종개	2008-10-06	BJ Kim
NIBR-P3357	COBITIDAE	<i>Iksookimia</i>	<i>koreensis</i>	참종개	2008-10-06	BJ Kim
NIBR-P3358	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-10-06	BJ Kim
NIBR-P3359	CYPRINIDAE	<i>Microphysogobio</i>	<i>yaluensis</i>	돌마자	2008-10-06	BJ Kim
NIBR-P3360	CYPRINIDAE	<i>Pseudorasbora</i>	<i>parva</i>	참붕어	2008-10-06	BJ Kim
NIBR-P3361	CYPRINIDAE	<i>Zacco</i>	<i>koreanus</i>	참갈겨니	2008-10-06	BJ Kim
NIBR-P3362	BALITORIDAE	<i>Orthrias</i>	<i>nudus</i>	대륙종개	2008-10-06	BJ Kim
NIBR-P3363	CYPRINIDAE	<i>Pseudogobio</i>	<i>esocinus</i>	모래무지	2008-10-06	BJ Kim
NIBR-P3364	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-10-06	BJ Kim
NIBR-P3365	CYPRINIDAE	<i>Hemibarbus</i>	<i>longirostris</i>	참마자	2008-10-06	BJ Kim
NIBR-P3366	CYPRINIDAE	<i>Microphysogobio</i>	<i>yaluensis</i>	돌마자	2008-10-06	BJ Kim
NIBR-P3367	GOBIIDAE	<i>Rhinogobius</i>	<i>brunneus</i>	밀어	2008-10-06	BJ Kim
NIBR-P3368	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-10-06	BJ Kim
NIBR-P3369	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-10-06	BJ Kim
NIBR-P3370	CYPRINIDAE	<i>Hemibarbus</i>	<i>labeo</i>	누치	2008-10-07	BJ Kim
NIBR-P3371	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-10-07	BJ Kim
NIBR-P3372	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-10-07	BJ Kim
NIBR-P3373	GOBIIDAE	<i>Rhinogobius</i>	<i>brunneus</i>	밀어	2008-10-07	BJ Kim
NIBR-P3374	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-10-07	BJ Kim
NIBR-P3375	CYPRINIDAE	<i>Gobiobotia</i>	<i>macrocephalus</i>	꾸꾸리	2008-10-07	BJ Kim
NIBR-P3376	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-10-07	BJ Kim
NIBR-P3377	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-10-07	BJ Kim
NIBR-P3378	CYPRINIDAE	<i>Zacco</i>	<i>koreanus</i>	참갈겨니	2008-10-07	BJ Kim
NIBR-P3379	CYPRINIDAE	<i>Acheilognathus</i>	<i>yamatsutae</i>	줄납자루	2008-10-07	BJ Kim
NIBR-P3380	COBITIDAE	<i>Koreocobitis</i>	<i>rotundicaudata</i>	새코미꾸리	2008-10-07	BJ Kim

Appendix 1. Continued.

Collection no.	Family	Genus	Species	Korean name	Date	Collector
NIBR-P3381	BAGRIDAЕ	<i>Pseudobagrus</i>	<i>koreanus</i>	눈동자개	2008-10-07	BJ Kim
NIBR-P3382	CYPRINIDAE	<i>Pseudogobio</i>	<i>esocinus</i>	모래무지	2008-10-07	BJ Kim
NIBR-P3383	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-10-07	BJ Kim
NIBR-P3384	ODONTOBUTIDAE	<i>Odontobutis</i>	<i>interrupta</i>	얼룩동사리	2008-10-07	BJ Kim
NIBR-P3385	CYPRINIDAE	<i>Rhynchocypris</i>	<i>oxycephalus</i>	버들치	2008-10-07	BJ Kim
NIBR-P3386	GOBIIDAE	<i>Rhinogobius</i>	<i>brunneus</i>	밀어	2008-10-07	BJ Kim
NIBR-P3387	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-10-07	BJ Kim
NIBR-P3388	CYPRINIDAE	<i>Zacco</i>	<i>koreanus</i>	참갈겨니	2008-10-07	BJ Kim
NIBR-P3389	CYPRINIDAE	<i>Cyprinus</i>	<i>carpio</i>	잉어	2008-10-07	BJ Kim
NIBR-P3390	CYPRINIDAE	<i>Carassius</i>	<i>auratus</i>	붕어	2008-10-07	BJ Kim
NIBR-P3391	CYPRINIDAE	<i>Pseudogobio</i>	<i>esocinus</i>	모래무지	2008-10-07	BJ Kim
NIBR-P3392	CYPRINIDAE	<i>Microphysogobio</i>	<i>longidorsalis</i>	배가사리	2008-10-07	BJ Kim
NIBR-P3393	SILURIDAE	<i>Silurus</i>	<i>asotus</i>	메기	2008-10-07	BJ Kim
NIBR-P3394	CYPRINIDAE	<i>Hemibarbus</i>	<i>labeo</i>	누치	2008-10-07	BJ Kim
NIBR-P3395	ODONTOBUTIDAE	<i>Odontobutis</i>	<i>interrupta</i>	얼룩동사리	2008-10-07	BJ Kim
NIBR-P3396	CYPRINIDAE	<i>Microphysogobio</i>	<i>yaluensis</i>	돌마자	2008-10-07	BJ Kim
NIBR-P3397	CYPRINIDAE	<i>Acheilognathus</i>	<i>rhombeus</i>	남자리	2008-10-07	BJ Kim
NIBR-P3398	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-10-07	BJ Kim
NIBR-P3399	GOBIIDAE	<i>Rhinogobius</i>	<i>brunneus</i>	밀어	2008-10-07	BJ Kim
NIBR-P3400	CYPRINIDAE	<i>Hemibarbus</i>	<i>longirostris</i>	참마자	2008-10-07	BJ Kim
NIBR-P3401	CYPRINIDAE	<i>Rhynchocypris</i>	<i>steindachneri</i>	버들개	2008-10-07	BJ Kim
NIBR-P3402	CYPRINIDAE	<i>Rhynchocypris</i>	<i>oxycephalus</i>	버들치	2008-10-07	BJ Kim
NIBR-P3403	CENTROPOMIDAE	<i>Coreoperca</i>	<i>herzi</i>	꺽지	2008-10-07	BJ Kim
NIBR-P3404	COBITIDAE	<i>Koreocobitis</i>	<i>rotundicaudata</i>	새코미꾸리	2008-10-08	BJ Kim
NIBR-P3405	CYPRINIDAE	<i>Pseudogobio</i>	<i>esocinus</i>	모래무지	2008-10-08	BJ Kim
NIBR-P3406	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-10-08	BJ Kim
NIBR-P3407	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-10-08	BJ Kim
NIBR-P3408	BAGRIDAЕ	<i>Pseudobagrus</i>	<i>koreanus</i>	눈동자개	2008-10-08	BJ Kim
NIBR-P3409	ODONTOBUTIDAE	<i>Odontobutis</i>	<i>interrupta</i>	얼룩동사리	2008-10-08	BJ Kim
NIBR-P3410	CYPRINIDAE	<i>Acheilognathus</i>	<i>rhombeus</i>	남자리	2008-10-08	BJ Kim
NIBR-P3411	COBITIDAE	<i>Iksookimia</i>	<i>koreensis</i>	참종개	2008-10-08	BJ Kim
NIBR-P3412	CYPRINIDAE	<i>Zacco</i>	<i>koreanus</i>	참갈겨니	2008-10-08	BJ Kim
NIBR-P3413	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-10-08	BJ Kim
NIBR-P3414	CYPRINIDAE	<i>Pseudogobio</i>	<i>esocinus</i>	모래무지	2008-10-08	BJ Kim
NIBR-P3415	ODONTOBUTIDAE	<i>Odontobutis</i>	<i>interrupta</i>	얼룩동사리	2008-10-08	BJ Kim
NIBR-P3416	CYPRINIDAE	<i>Acheilognathus</i>	<i>rhombeus</i>	남자리	2008-10-08	BJ Kim
NIBR-P3417	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-10-08	BJ Kim
NIBR-P3418	CYPRINIDAE	<i>Zacco</i>	<i>platypus</i>	피라미	2008-10-08	BJ Kim
NIBR-P3419	CYPRINIDAE	<i>Zacco</i>	<i>koreanus</i>	참갈겨니	2008-10-08	BJ Kim
NIBR-P3420	COBITIDAE	<i>Iksookimia</i>	<i>koreensis</i>	참종개	2008-10-08	BJ Kim
NIBR-P3421	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-10-08	BJ Kim
NIBR-P3422	CYPRINIDAE	<i>Squalidus</i>	<i>gracilis</i>	긴풀개	2008-10-08	BJ Kim
NIBR-P3423	CYPRINIDAE	<i>Rhodeus</i>	<i>uyekii</i>	각시붕어	2008-10-08	BJ Kim
NIBR-P3424	CYPRINIDAE	<i>Acheilognathus</i>	<i>yamatsutae</i>	줄납자루	2008-10-08	BJ Kim
NIBR-P3425	CYPRINIDAE	<i>Acheilognathus</i>	<i>lanceolatus</i>	납자루	2008-10-08	BJ Kim
NIBR-P3426	CYPRINIDAE	<i>Zacco</i>	<i>koreanus</i>	참갈겨니	2008-10-08	BJ Kim
NIBR-P3427	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-10-08	BJ Kim
NIBR-P3428	CENTROPOMIDAE	<i>Coreoperca</i>	<i>herzi</i>	꺽지	2008-10-08	BJ Kim
NIBR-P3429	COBITIDAE	<i>Iksookimia</i>	<i>koreensis</i>	참종개	2008-10-08	BJ Kim
NIBR-P3430	ODONTOBUTIDAE	<i>Odontobutis</i>	<i>interrupta</i>	얼룩동사리	2008-10-08	BJ Kim
NIBR-P3431	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-10-08	BJ Kim
NIBR-P3432	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-10-08	BJ Kim
NIBR-P3433	CYPRINIDAE	<i>Rhynchocypris</i>	<i>oxycephalus</i>	버들치	2008-10-08	BJ Kim
NIBR-P3434	ODONTOBUTIDAE	<i>Odontobutis</i>	<i>interrupta</i>	얼룩동사리	2008-10-08	BJ Kim
NIBR-P3435	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-10-08	BJ Kim
NIBR-P3436	CENTROPOMIDAE	<i>Coreoperca</i>	<i>herzi</i>	꺽지	2008-10-08	BJ Kim
NIBR-P3437	COBITIDAE	<i>Iksookimia</i>	<i>koreensis</i>	참종개	2008-10-08	BJ Kim
NIBR-P3438	COTTIDAE	<i>Cottus</i>	<i>koreanus</i>	둑종개	2008-10-08	BJ Kim
NIBR-P3439	BALITORIDAE	<i>Orthrias</i>	<i>nudus</i>	대륙종개	2008-10-09	BJ Kim
NIBR-P3440	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-10-09	BJ Kim
NIBR-P3441	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-10-09	BJ Kim

Appendix 1. Continued.

Collection no.	Family	Genus	Species	Korean name	Date	Collector
NIBR-P3442	CYPRINIDAE	Zacco	koreanus	참갈겨니	2008-10-09	BJ Kim
NIBR-P3443	COBITIDAE	Iksookimia	koreensis	참종개	2008-10-09	BJ Kim
NIBR-P3444	COBITIDAE	Misgurnus	anguillicaudatus	미꾸리	2008-10-09	BJ Kim
NIBR-P3445	CYPRINIDAE	Acheilognathus	lanceolatus	납자루	2008-10-09	BJ Kim
NIBR-P3446	CYPRINIDAE	Rhynchocypris	oxycephalus	버들치	2008-10-09	BJ Kim
NIBR-P3447	CYPRINIDAE	Rhodeus	uyekii	각시봉어	2008-10-09	BJ Kim
NIBR-P3448	CYPRINIDAE	Aphyocypris	chinensis	왜몰개	2008-10-09	BJ Kim
NIBR-P3449	ODONTOBUTIDAE	Odontobutis	interrupta	얼룩동사리	2008-10-09	BJ Kim
NIBR-P3450	CYPRINIDAE	Zacco	platypus	피라미	2008-10-09	BJ Kim
NIBR-P3451	CYPRINIDAE	Acheilognathus	yamatsutae	줄납자루	2008-10-09	BJ Kim
NIBR-P3452	CYPRINIDAE	Microphysogobio	yaluensis	돌마자	2008-10-09	BJ Kim
NIBR-P3453	CENTROPOMIDAE	Coreoperca	herzi	꺽지	2008-10-09	BJ Kim
NIBR-P3454	CYPRINIDAE	Pungtungia	herzi	돌고기	2008-10-09	BJ Kim
NIBR-P3455	CYPRINIDAE	Pungtungia	herzi	돌고기	2008-10-09	BJ Kim
NIBR-P3456	CYPRINIDAE	Gobiobotia	brevibarba	돌상어	2008-10-09	BJ Kim
NIBR-P3457	CYPRINIDAE	Sarcocheilichthys	varieatus	참중고기	2008-10-09	BJ Kim
NIBR-P3791	CYPRINIDAE	Zacco	koreanus	참갈겨니	2008-11-04	BJ Kim
NIBR-P3792	CYPRINIDAE	Zacco	platypus	피라미	2008-11-04	BJ Kim
NIBR-P3793	CYPRINIDAE	Carassius	auratus	봉어	2008-11-04	BJ Kim
NIBR-P3794	COBITIDAE	Iksookimia	koreensis	참종개	2008-11-04	BJ Kim
NIBR-P3795	CYPRINIDAE	Pseudorasbora	parva	참붕어	2008-11-04	BJ Kim
NIBR-P3796	GOBIIDAE	Rhinogobius	brunneus	밀어	2008-11-04	BJ Kim
NIBR-P3797	CYPRINIDAE	Ladislavia	taczanowski	새미	2008-11-04	BJ Kim
NIBR-P3798	CYPRINIDAE	Pungtungia	herzi	돌고기	2008-11-04	BJ Kim
NIBR-P3799	CYPRINIDAE	Rhynchocypris	oxycephalus	버들치	2008-11-04	BJ Kim
NIBR-P3800	CYPRINIDAE	Rhynchocypris	steindachneri	버들개	2008-11-04	BJ Kim
NIBR-P3801	CENTROPOMIDAE	Coreoperca	herzi	꺽지	2008-11-05	BJ Kim
NIBR-P3802	CYPRINIDAE	Pungtungia	herzi	돌고기	2008-11-05	BJ Kim
NIBR-P3803	CYPRINIDAE	Pseudogobio	esocinus	모래무지	2008-11-05	BJ Kim
NIBR-P3804	CYPRINIDAE	Zacco	koreanus	참갈겨니	2008-11-05	BJ Kim
NIBR-P3805	CYPRINIDAE	Zacco	platypus	피라미	2008-11-05	BJ Kim
NIBR-P3806	COBITIDAE	Misgurnus	anguillicaudatus	미꾸리	2008-11-05	BJ Kim
NIBR-P3807	CYPRINIDAE	Pungtungia	herzi	돌고기	2008-11-05	BJ Kim
NIBR-P3808	CYPRINIDAE	Acheilognathus	rhombeus	납지리	2008-11-05	BJ Kim
NIBR-P3809	CYPRINIDAE	Acheilognathus	lanceolatus	납자루	2008-11-05	BJ Kim
NIBR-P3810	CYPRINIDAE	Coreoleuciscus	splendidus	쉬리	2008-11-05	BJ Kim
NIBR-P3811	CYPRINIDAE	Carassius	auratus	봉어	2008-11-05	BJ Kim
NIBR-P3812	CYPRINIDAE	Carassius	auratus	봉어	2008-11-05	BJ Kim
NIBR-P3813	ODONTOBUTIDAE	Odontobutis	interrupta	얼룩동사리	2008-11-05	BJ Kim
NIBR-P3814	SILURIDAE	Silurus	asotus	매기	2008-11-05	BJ Kim
NIBR-P3815	BAGRIDAE	Pseudobagrus	koreanus	눈동자개	2008-11-05	BJ Kim
NIBR-P3816	CYPRINIDAE	Acheilognathus	rhombeus	납지리	2008-11-05	BJ Kim
NIBR-P3817	CYPRINIDAE	Rhynchocypris	oxycephalus	버들치	2008-11-05	BJ Kim
NIBR-P3818	CYPRINIDAE	Pungtungia	herzi	돌고기	2008-11-05	BJ Kim
NIBR-P3819	CYPRINIDAE	Hemibarbus	longirostris	참마자	2008-11-05	BJ Kim
NIBR-P3820	CYPRINIDAE	Abbottina	rivularis	버들매치	2008-11-05	BJ Kim
NIBR-P3821	CYPRINIDAE	Zacco	koreanus	참갈겨니	2008-11-05	BJ Kim
NIBR-P3822	CYPRINIDAE	Zacco	platypus	피라미	2008-11-05	BJ Kim
NIBR-P3823	CYPRINIDAE	Coreoleuciscus	splendidus	쉬리	2008-11-05	BJ Kim
NIBR-P3824	CYPRINIDAE	Acheilognathus	lanceolatus	납자루	2008-11-05	BJ Kim
NIBR-P3825	CYPRINIDAE	Carassius	auratus	봉어	2008-11-05	BJ Kim
NIBR-P3826	CYPRINIDAE	Zacco	koreanus	참갈겨니	2008-11-05	BJ Kim
NIBR-P3827	CYPRINIDAE	Zacco	platypus	피라미	2008-11-05	BJ Kim
NIBR-P3828	ODONTOBUTIDAE	Odontobutis	interrupta	얼룩동사리	2008-11-05	BJ Kim
NIBR-P3829	CYPRINIDAE	Acheilognathus	lanceolatus	납자루	2008-11-05	BJ Kim
NIBR-P3830	COBITIDAE	Iksookimia	koreensis	참종개	2008-11-05	BJ Kim
NIBR-P3831	CYPRINIDAE	Carassius	auratus	봉어	2008-11-06	BJ Kim
NIBR-P3832	CYPRINIDAE	Pseudogobio	esocinus	모래무지	2008-11-06	BJ Kim
NIBR-P3833	CYPRINIDAE	Rhynchocypris	oxycephalus	버들치	2008-11-06	BJ Kim
NIBR-P3834	CYPRINIDAE	Zacco	platypus	피라미	2008-11-06	BJ Kim
NIBR-P3835	CYPRINIDAE	Coreoleuciscus	splendidus	쉬리	2008-11-06	BJ Kim

Appendix 1. Continued.

Collection no.	Family	Genus	Species	Korean name	Date	Collector
NIBR-P3836	CYPRINIDAE	<i>Acheilognathus</i>	<i>rhombeus</i>	납지리	2008-11-06	BJ Kim
NIBR-P3837	CYPRINIDAE	<i>Hemibarbus</i>	<i>labeo</i>	누치	2008-11-06	BJ Kim
NIBR-P3838	CYPRINIDAE	<i>Pseudorasbora</i>	<i>parva</i>	참붕어	2008-11-06	BJ Kim
NIBR-P3839	CYPRINIDAE	<i>Abbottina</i>	<i>rivularis</i>	버들매치	2008-11-06	BJ Kim
NIBR-P3840	CYPRINIDAE	<i>Hemibarbus</i>	<i>longirostris</i>	참마자	2008-11-06	BJ Kim
NIBR-P3841	CYPRINIDAE	<i>Pungtungia</i>	<i>herzi</i>	돌고기	2008-11-06	BJ Kim
NIBR-P3842	CENTROPOMIDAE	<i>Coreoperca</i>	<i>herzi</i>	꺽지	2008-11-06	BJ Kim
NIBR-P3843	COBITIDAE	<i>Misgurnus</i>	<i>mizolepis</i>	미꾸라지	2008-11-06	BJ Kim
NIBR-P3844	CYPRINIDAE	<i>Coreoleuciscus</i>	<i>splendidus</i>	쉬리	2008-11-06	BJ Kim
NIBR-P3845	CYPRINIDAE	<i>Zacco</i>	<i>koreanus</i>	참갈겨니	2008-11-06	BJ Kim

Appendix 2. Collection list of amphibians.

Collection no.	Family	Genus	Species	Korean name	Date	Collector
NIBRAM100106	BUFONIDAE	<i>Bufo</i>	<i>bufo</i>	두꺼비	2008-03-18	Sang-Cheol Lee
NIBRAM100107	BUFONIDAE	<i>Bufo</i>	<i>bufo</i>	두꺼비	2008-03-18	Sang-Cheol Lee
NIBRAM100264	HYLIDAE	<i>Hyla</i>	<i>japonica</i>	청개구리	2008-05-16	Sang-Cheol Lee
NIBRAM100265	DISCOGLOSSIDAE	<i>Bombina</i>	<i>orientalis</i>	무당개구리	2008-05-16	Sang-Cheol Lee
NIBRAM100266	DISCOGLOSSIDAE	<i>Bombina</i>	<i>orientalis</i>	무당개구리	2008-05-16	Sang-Cheol Lee
NIBRAM100267	DISCOGLOSSIDAE	<i>Bombina</i>	<i>orientalis</i>	무당개구리	2008-05-16	Sang-Cheol Lee
NIBRAM100268	DISCOGLOSSIDAE	<i>Bombina</i>	<i>orientalis</i>	무당개구리	2008-05-16	Sang-Cheol Lee
NIBRAM100269	DISCOGLOSSIDAE	<i>Bombina</i>	<i>orientalis</i>	무당개구리	2008-05-16	Sang-Cheol Lee
NIBRAM100273	HYNOBIIDAE	<i>Onychodactylus</i>	<i>fischeri</i>	꼬리치레도롱뇽	2008-05-16	Sang-Cheol Lee
NIBRAM100293	RANIDAE	<i>Rana</i>	<i>temporalia</i>	북방산개구리	2008-05-16	Sang-Cheol Lee
NIBRAM100276	BUFONIDAE	<i>Bufo</i>	<i>bufo</i>	두꺼비	2008-05-22	Sang-Cheol Lee
NIBRAM100277	HYLIDAE	<i>Hyla</i>	<i>japonica</i>	청개구리	2008-05-22	Sang-Cheol Lee
NIBRAM100279	HYNOBIIDAE	<i>Onychodactylus</i>	<i>fischeri</i>	꼬리치레도롱뇽	2008-05-23	Sang-Cheol Lee
NIBRAM100237	RANIDAE	<i>Pelophylax</i>	<i>nigromaculatus</i>	참개구리	2008-06-03	Sang-Cheol Lee
NIBRAM100245	BUFONIDAE	<i>Bufo</i>	<i>stejnegeri</i>	풀두꺼비	2008-06-23	Sang-Cheol Lee
NIBRAM100246	HYNOBIIDAE	<i>Onychodactylus</i>	<i>fischeri</i>	꼬리치레도롱뇽	2008-06-23	Sang-Cheol Lee
NIBRAM100289	RANIDAE	<i>Rana</i>	<i>nigromaculata</i>	참개구리	2008-07-16	Sang-Cheol Lee
NIBRAM100244	RANIDAE	<i>Pelophylax</i>	<i>nigromaculatus</i>	참개구리	2008-07-18	Sang-Cheol Lee
NIBRAM100248	HYLIDAE	<i>Hyla</i>	<i>japonica</i>	청개구리	2008-07-21	Sang-Cheol Lee
NIBRAM100249	RANIDAE	<i>Rana</i>	<i>rugosa</i>	음개구리	2008-07-21	Sang-Cheol Lee
NIBRAM100235	BUFONIDAE	<i>Bufo</i>	<i>stejnegeri</i>	풀두꺼비	2008-09-10	Sang-Cheol Lee
NIBRAM100236	RANIDAE	<i>Pelophylax</i>	<i>nigromaculatus</i>	참개구리	2008-09-10	Sang-Cheol Lee

Appendix 3. Collection list of reptiles.

Collection no.	Family	Genus	Species	Korean name	Date	Collector
NIBRRP100158	COLUBRIDAE	<i>Rabdophius</i>	<i>tigrinus</i>	유혈목이	2008-05-17	Sang-Cheol Lee
NIBRRP100162	COLUBRIDAE	<i>Elaphes</i>	<i>dione</i>	누룩뱀	2008-05-17	Sang-Cheol Lee
NIBRRP100163	COLUBRIDAE	<i>Elaphes</i>	<i>dione</i>	누룩뱀	2008-05-17	Sang-Cheol Lee
NIBRRP100154	VIPERIDAE	<i>Gloydius</i>	<i>ussuriensis</i>	쇠살모사	2008-05-20	Sang-Cheol Lee
NIBRRP100155	VIPERIDAE	<i>Gloydius</i>	<i>ussuriensis</i>	쇠살모사	2008-05-20	Sang-Cheol Lee
NIBRRP100164	COLUBRIDAE	<i>Elaphes</i>	<i>rufodorsata</i>	무자치	2008-05-20	Sang-Cheol Lee
NIBRRP100165	COLUBRIDAE	<i>Rabdophius</i>	<i>tigrinus</i>	유혈목이	2008-05-23	Sang-Cheol Lee
NIBRRP100167	VIPERIDAE	<i>Gloydius</i>	<i>ussuriensis</i>	쇠살모사	2008-05-23	Sang-Cheol Lee
NIBRRP100177	COLUBRIDAE	<i>Amphiesma</i>	<i>vibakari</i>	대륙유혈목이	2008-05-23	Sang-Cheol Lee
NIBRRP100183	VIPERIDAE	<i>Gloydius</i>	<i>ussuriensis</i>	쇠살모사	2008-07-18	Sang-Cheol Lee
NIBRRP100184	VIPERIDAE	<i>Gloydius</i>	<i>ussuriensis</i>	쇠살모사	2008-07-18	Sang-Cheol Lee
NIBRRP100185	VIPERIDAE	<i>Gloydius</i>	<i>ussuriensis</i>	쇠살모사	2008-07-18	Sang-Cheol Lee
NIBRRP100156	COLUBRIDAE	<i>Elaphes</i>	<i>rufodorsata</i>	무자치	2008-07-22	Sang-Cheol Lee
NIBRRP100157	COLUBRIDAE	<i>Rabdophius</i>	<i>tigrinus</i>	유혈목이	2008-07-22	Sang-Cheol Lee
NIBRRP100159	COLUBRIDAE	<i>Elaphes</i>	<i>dione</i>	누룩뱀	2008-07-22	Sang-Cheol Lee
NIBRRP100160	VIPERIDAE	<i>Gloydius</i>	<i>ussuriensis</i>	쇠살모사	2008-07-22	Sang-Cheol Lee
NIBRRP100169	COLUBRIDAE	<i>Elaphes</i>	<i>rufodorsata</i>	무자치	2008-10-06	Sang-Cheol Lee
NIBRRP100171	COLUBRIDAE	<i>Elaphes</i>	<i>dione</i>	누룩뱀	2008-10-06	Sang-Cheol Lee

Appendix 4. Collection list of birds.

Collection no.	Family	Genus	Species	Korean name	Date	Collector
NIBRAV100850	PARIDAE	<i>Parus</i>	<i>palustris</i>	쇠박새	2008-02-21	Hur, Wee-Haeng
NIBRAV100569	TURDIDAE	<i>Phoenicurus</i>	<i>auroreus</i>	딱새	2008-02-22	Hur, Wee-Haeng
NIBRAV100570	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-02-22	Hur, Wee-Haeng
NIBRAV100848	PARIDAE	<i>Parus</i>	<i>major</i>	박새	2008-03-20	Yeong-Seok Jo
NIBRAV100849	PARIDAE	<i>Parus</i>	<i>major</i>	박새	2008-03-20	Yeong-Seok Jo
NIBRAV100851	SYLVIIDAE	<i>Urosphena</i>	<i>squamiceps</i>	숲새	2008-05-15	WH Hur, H. Seomun
NIBRAV100799	TURDIDAE	<i>Phoenicurus</i>	<i>auroreus</i>	딱새	2008-10-22	WH Hur, H. Seomun
NIBRAV100800	TURDIDAE	<i>Phoenicurus</i>	<i>auroreus</i>	딱새	2008-10-22	WH Hur, H. Seomun
NIBRAV100801	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-22	WH Hur, H. Seomun
NIBRAV100802	EMBERIZIDAE	<i>Emberiza</i>	<i>tristrami</i>	흰배멧새	2008-10-22	WH Hur, H. Seomun
NIBRAV100803	TURDIDAE	<i>Phoenicurus</i>	<i>auroreus</i>	딱새	2008-10-22	WH Hur, H. Seomun
NIBRAV100804	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-22	WH Hur, H. Seomun
NIBRAV100805	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-22	WH Hur, H. Seomun
NIBRAV100806	PARIDAE	<i>Parus</i>	<i>major</i>	박새	2008-10-22	WH Hur, H. Seomun
NIBRAV100807	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-22	WH Hur, H. Seomun
NIBRAV100808	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-22	WH Hur, H. Seomun
NIBRAV100809	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-22	WH Hur, H. Seomun
NIBRAV100810	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-22	WH Hur, H. Seomun
NIBRAV100811	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-22	WH Hur, H. Seomun
NIBRAV100812	TURDIDAE	<i>Phoenicurus</i>	<i>auroreus</i>	딱새	2008-10-22	WH Hur, H. Seomun
NIBRAV100759	PYCNONOTIDAE	<i>Microscelis</i>	<i>amaurotis</i>	직박구리	2008-10-23	WH Hur, H. Seomun
NIBRAV100813	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100814	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100815	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100816	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100817	EMBERIZIDAE	<i>Emberiza</i>	<i>spodocephala</i>	족새	2008-10-23	WH Hur, H. Seomun
NIBRAV100818	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100819	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100820	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100821	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100822	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100823	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100824	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100825	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100826	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100827	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100828	TURDIDAE	<i>Phoenicurus</i>	<i>auroreus</i>	딱새	2008-10-23	WH Hur, H. Seomun
NIBRAV100829	TURDIDAE	<i>Phoenicurus</i>	<i>auroreus</i>	딱새	2008-10-23	WH Hur, H. Seomun
NIBRAV100830	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100831	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100832	PARIDAE	<i>Parus</i>	<i>palustris</i>	쇠박새	2008-10-23	WH Hur, H. Seomun
NIBRAV100833	PARIDAE	<i>Parus</i>	<i>palustris</i>	쇠박새	2008-10-23	WH Hur, H. Seomun
NIBRAV100834	SYLVIIDAE	<i>Phylloscopus</i>	<i>inornatus</i>	노랑눈썹솔새	2008-10-23	WH Hur, H. Seomun
NIBRAV100835	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100836	EMBERIZIDAE	<i>Emberiza</i>	<i>elegans</i>	노랑턱멧새	2008-10-23	WH Hur, H. Seomun
NIBRAV100837	EMBERIZIDAE	<i>Emberiza</i>	<i>spodocephala</i>	족새	2008-10-23	WH Hur, H. Seomun
NIBRAV100838	EMBERIZIDAE	<i>Emberiza</i>	<i>rustica</i>	족새	2008-10-23	WH Hur, H. Seomun
NIBRAV100839	PARIDAE	<i>Parus</i>	<i>major</i>	박새	2008-10-23	WH Hur, H. Seomun
NIBRAV100840	PARIDAE	<i>Parus</i>	<i>major</i>	박새	2008-10-23	WH Hur, H. Seomun
NIBRAV100841	PARIDAE	<i>Parus</i>	<i>major</i>	박새	2008-10-23	WH Hur, H. Seomun
NIBRAV100842	PARIDAE	<i>Parus</i>	<i>major</i>	박새	2008-10-23	WH Hur, H. Seomun

Appendix 5. Collection list of mammals.

Collection no.	Family	Genus	Species	Korean name	Date	Collector
NIBRMM100728	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-Seok Jo
NIBRMM100729	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100730	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100731	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100732	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100733	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo

Appendix 5. Continued.

Collection no.	Family	Genus	Species	Korean name	Date	Collector
NIBRMM100734	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100735	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100736	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100737	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100752	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-18	Yeong-Seok Jo
NIBRMM100754	CERVIDAE	<i>Hydropotes</i>	<i>inermis</i>	고라니	2008-03-18	Yeong-Seok Jo
NIBRMM100755	CERVIDAE	<i>Hydropotes</i>	<i>inermis</i>	고라니	2008-03-18	Yeong-Seok Jo
NIBRMM100756	MURIDAE	<i>Mus</i>	<i>musculus</i>	생쥐	2008-03-19	Yeong-Seok Jo
NIBRMM100757	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-19	Yeong-Seok Jo
NIBRMM100758	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-19	Yeong-Seok Jo
NIBRMM100759	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-19	Yeong-Seok Jo
NIBRMM100760	SCIURIDAE	<i>Tamias</i>	<i>sibiricus</i>	다람쥐	2008-03-20	Yeong-Seok Jo
NIBRMM100761	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-20	Yeong-Seok Jo
NIBRMM100762	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-20	Yeong-Seok Jo
NIBRMM100764	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-20	Yeong-Seok Jo
NIBRMM100765	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-21	Yeong-Seok Jo
NIBRMM100766	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-21	Yeong-Seok Jo
NIBRMM100807	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100808	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100809	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100810	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100811	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100812	MURIDAE	<i>Mus</i>	<i>musculus</i>	생쥐	2008-10-07	Yeong-seok Jo
NIBRMM100813	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100814	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100815	SORICIDAE	<i>Crocidura</i>	<i>lasiura</i>	땃쥐	2008-10-08	Yeong-seok Jo
NIBRMM100816	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-08	Yeong-Seok Jo
NIBRMM100817	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-08	Yeong-Seok Jo
NIBRMM100818	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-08	Yeong-Seok Jo
NIBRMM100819	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-08	Yeong-Seok Jo
NIBRMM100820	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-08	Yeong-Seok Jo
NIBRMM100821	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-08	Yeong-Seok Jo
NIBRMM100822	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-08	Yeong-Seok Jo
NIBRMM100857	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100858	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100859	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100860	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100861	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100862	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100863	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100864	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100865	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-19	Yeong-Seok Jo
NIBRMM100866	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-20	Yeong-Seok Jo
NIBRMM100868	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-20	Yeong-Seok Jo
NIBRMM100869	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-21	Yeong-Seok Jo
NIBRMM100870	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-21	Yeong-Seok Jo
NIBRMM100889	SCIURIDAE	<i>Tamias</i>	<i>sibiricus</i>	다람쥐	2008-03-20	Yeong-Seok Jo
NIBRMM100893	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-18	Yeong-Seok Jo
NIBRMM100894	MURIDAE	<i>Mus</i>	<i>musculus</i>	생쥐	2008-03-19	Yeong-Seok Jo
NIBRMM100895	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-19	Yeong-Seok Jo
NIBRMM100897	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-03-19	Yeong-Seok Jo
NIBRMM100899	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100900	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-06-26	Yeong-Seok Jo
NIBRMM100901	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100902	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100903	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100904	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100905	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100906	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100907	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100908	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-07	Yeong-seok Jo
NIBRMM100909	SORICIDAE	<i>Crocidura</i>	<i>lasiura</i>	땃쥐	2008-10-08	Yeong-seok Jo
NIBRMM100910	MURIDAE	<i>Apodemus</i>	<i>agrarius</i>	등줄쥐	2008-10-08	Yeong-Seok Jo