



EAAFP

2023-2024 Interim Report on the Civilian Organization Small Grant Project

<Project Overview>

- Organization Name: Birds Korea, Yeoncheon
- Project Name: Winter Census of Scaly-sided Merganser in FNS
- Project Period: October 1, 2023, to March 31, 2024
- Project Cost: 3,000,000 KRW

2023. 12. 10.

Birds Korea, Yeoncheon (Signature)



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I. Project Overview

Project Name	Winter Census of Scaly-sided Merganser in FNS	Field	Special contest
		Theme of the project	habitats in East Asian-Australasian flyway
사업기간	2023. 10. 1 ~ 2024. 3. 31. (6 months)		
Purpose of the projects	<ul style="list-style-type: none"> • Joining of Scaly-sided Merganser in FNS, Imjin River, Yeoncheon-gun (scheduled for November 2023) and support from civil society. • Strengthening the professional capabilities of citizen scientists as a continuation of the 2022-23 winter project. • Improving the accuracy of data for the conservation by simultaneous and focusing census on FNS 		
Content of project and method	<ul style="list-style-type: none"> • Beneficiaries <ol style="list-style-type: none"> 1. Members of Birds Korea, Yeoncheon: Strengthen its expertise through continuous census of Scaly-sided Merganser for two consecutive years; Researchers: Seunggwang Baek (Researcher), Sooyoung Lee (Researcher), Ryang Jang (Research Assistant), Soojin Lee (Research Assistant), Heesong Kim (Research Assistant), Bujin Kim (Research Assistant)) 2. Yeoncheon-gun and residents: <ol style="list-style-type: none"> i. Emphasizing the importance of the Biosphere Reserve of the Imjin River in Yeoncheon through FNS membership. ii. Scaly-sided Merganser is highlighted as the epitome of Yeoncheon-gun as an indicator of habitat health and a flagpole. iii. Providing a driving force for the growth of ecotourism in the biosphere reserve of the Imjin River. iv. Creating a 'Model Case' for conservation measures in the era of climate crisis. • Location: Imjin River – FNS for Scaly-sided Mergansers (The area of the census; Pilsung Bridge in the Civilian Control Line ~ Columnar joint, Dongi-ri, is expected to join to FNS in 2023.11.) <ol style="list-style-type: none"> 1. Section 1: Pilsunggyo Bridge in the Civilian Control Line ~ above the Gunnam Dam 2. Section 2: down from Gunnam Dam ~ Columnar joint, Dongi-ri • Method <ol style="list-style-type: none"> 1. Dividing Imjin River FNS into 2 sections and Census during the migration season of Scaly-sided Merganser <ol style="list-style-type: none"> i. 2 teams (6 researchers) / total 5 times (October, November, December, February, March) 2. Support by MAB Korea for two mid-range field scopes – capacity building and improving accuracy. 		

	<ul style="list-style-type: none"> 3. Meeting with Residents: Sharing and spreading knowledge and information with locals. 4. Sharing and promoting FNS and Scaly-sided Merganser after the announcement of FNS membership. <ul style="list-style-type: none"> i. Recruiting around 10 residents who are interested in. ii. Using the ppt produced by Dr. Nile Moors, a director of Birds Korea. iii. Introducing the EAAFP FNS and Scaly-sided merganser, sharing measures for the conservation. <ul style="list-style-type: none"> • Expected Effect <ul style="list-style-type: none"> 1. Sharing and spreading knowledge information within the region with Yeoncheon-gun's announcement of FNS membership (planned) on November 2023. 2. Securing spots for citizen scientists as partners of Public-Private Governance. 3. Natural Monument Protection Zone, Scaly-sided Merganser FNS, and Yeoncheon Imjin River Biosphere Reserve, highlighting biodiversity and important habitats in Yeoncheon-gun. 4. Making a start for discussion on conservation measures as overlapped protected areas. 5. Making a foundation of the virtuous cycle structure for 'appropriate conservation measures → restoration of biodiversity and habitats → highlighted as a hot spot for ecotourism and research place → revitalization of the local economy'. 		
Total Project Cost (Unit: KRW)	Total amount	Supported	Others
	3,000,000 KRW	3,000,000 KRW	
Submission date	2023. 12. 10.		

II. Project Results

1. Performance by schedule

Project Date	Project Plan	detailed implementation results (performance)	Details on implementation	Achievement rate
2023. 10. 19.	Consultation on simultaneous investigation	- written consultation by Dr. Nial Moores - Translation	- Korean translation: 2,100 words of written advice - Translation complete	100%
2023. 10. 24.	Investigator orientation	Preparation and sharing the result of consultation	-participation of 6 investigators -2h meeting	100%
2023. 10. 30.	1st Census	Census at Imjin River in section 1 and 2 by 2 teams	6 Investigators surveyed for about 4 hours per section	100%
2023. 11. 5.	2nd Census	Census at Imjin River in section 1 and 2 by 2 teams	6 Investigators surveyed for about 4 hours per section	100%
2023. 11. 17.	3rd Census *	Census at Imjin River in section 1 and 2 by 2 teams	6 Investigators surveyed for about 4 hours per section	100%
2024. 1.	Scaly-sided Merganser FNS – Meeting with the residents	Introduction and presentation of Scaly-sided Merganser FNS with residents in Yeoncheon	planned	
2024. 2.	4th Census	Census at Imjin River in section 1 and 2 by 2 teams	planned	
2024. 3.	5th Census	Census at Imjin River in section 1 and 2 by 2 teams	planned	
2024. 3.	Printing Report	Final Report Printing	planned	

* The third census was scheduled for December according to the project plan, but it was conducted in November as by Dr. Nial Moores' recommendation that it is important to secure data when the movement of Scaly-sided Merganser is concentrated.

2. Performance Analysis

A. Beneficiary target

- Members of Birds Korea, Yeoncheon: Strengthen its expertise through continuous census of Scaly-sided Merganser for two consecutive years;

List of researchers	Seunggwang Baek (Researcher)	Sooyoung Lee (Researcher)	Ryang Jang (Research Assistant)
	Soojin Lee (Research Assistant)	Heesong Kim (Research Assistant)	Bujin Kim (Research Assistant))

- Yeoncheon County and Yeoncheon County residents:
 - The importance of the Yeoncheon Imjin River Biosphere Reserve was highlighted through FNS membership:
"International Symposium on the Conservation of Scaly-sided Merganser" was held on 2023. 11. 21 and got high attention and good reviews from residents in Yeoncheon.
 - As an indicator species of habitat condition and flagship species, the Scaly-sided Merganser is highlighted as the epitome of Yeoncheon-gun County.
 - Motivation for the growth and improvement of ecotourism and ecological tourism in Imjin River Biosphere Reserve in Yeoncheon
 - The cornerstone for generating a 'good practice' on conservation in the climate crisis era:
At international symposiums(2023. 11. 21.), many residents cited "habit preservation" as their priority.

B. Project Target Area

"4. Project photos/video/other attachments - A. Consultation on census and translation of materials into Korean - 3. Map of the Imjin River and the area of the 12 zone factors".

C. Project Evaluation - *Evaluation planned for after the end of projects in 2024

- Criteria for schedule implementation plan

As described in "II. Business Results - 1. Performance by Schedule".

-2023.12. Current rate of implementation

Title of project	Item	Total buget(one thousand korean one)			Rate of implementation(%)
		sum	subsidy	expense from private budget	
	Grand - Total	3,000	3,000		53.3
Census	Sum	2,750	1,600		58.2
	Consultation	100	100		100
	Personnel expenses	2,500	1,500		60
	Print	150	150		0
Scaly-sided Merganser FNS meeting with local resident	sum	250	250		0
	Presentation	125	125		0
	Translation Eng to Kor	125	125		0
Grand - Total		3,000	3,000		53.3

Attachments:

I. Basic Monitoring Data







1 st Census: Southward migration season								2023. 10. 30. Monday	
1-6Section: Sooyoung Lee , Ryang Jang								7-12 Section: Seunggwang Baek, Soojin Lee, Heesong Kim, Bujin Kim	
Coun ting sectio n	St art ti me	En d Ti me	To tal	m ale	fem ale	Imm.	Pairs	Other species and notes	Weather
1	07:50	9:28	0	0	0	0	0	Whooper swan 2, White-naped Crane 13, Bad visibility.	9°C, foggy, northeasterly wind
2	9:28	9:53	0	0	0	0	0	Bad visibility	12°C
3	9:58	10:08	0	0	0	0	0	Good visibility	
4	10:09	10:17	0	0	0	0	0	Filming prohibited area. Car with 2 soldiers chased.	
5	10:21	10:32	0	0	0	0	0	Bad visibility	14°C, sunlight, fog
6	10:55	11:35	0	0	0	0	0	Mallard 17, Little grebe 3, good visibility	
11	7:30	8:30	5	3	0	0	1	Bad visibility	6°C. sunlight, fog
12	8:35	8:45	0	0	0	0	0	Bad visibility	7°C, sunlight, westerly wind
11	8:55	9:05	0	0	0	0	0	Mallard 17, Little grebe 3	
10	9:10	10:10	10	6	4	0	0	A stone collector	11°C, sunlight, westerly wind
9	10:15	10:30	0	0	0	0	0		13°C, sunlight, westerly wind
8	10:30	10:50	4	0	0	0	2		13°C, sunlight, westerly wind
7	10:55	11:15	0	0	0	0	0	angler	
total			19	9	4		3		

EBird records: <https://ebird.org/checklist/S153783377>

		
<p>Scaly-sided Mergansers © Seunggwang Baek</p>	<p>Scaly-sided Mergansers © Seunggwang Baek</p>	<p>Scaly-sided Mergansers © Seunggwang Baek</p>
		
<p>Section 11 © Seunggwang Baek</p>	<p>Section 6 © Sooyoung Lee</p>	<p>White-naped Crane © Sooyoung Lee</p>







2nd Census: Southward migration season								2023. 11. 05. Sunday	
1-6Section: Sooyoung Lee, Ryang Jang								7-12 Section: Seunggwang Baek, Soojin Lee, Heesong Kim, Bujin Kim	
Counting section	Start time	End Time	Total	male	female	Imm.	Pairs	Other species and notes	Weather
1	7:15	8:10	2	0	2	0	0	Whooper Swan 2, White-nepaed Crane 8, long waiting times due to heavy rain.	14°C, rain, northeast wind
2	8:11	8:50	3	2	1	0	1	60+ White-naped Cranes, rain stopped mostly around 8:20. A flick of White-naped Crane seemed to fly up from Mangje rapids appeared to scatter into nearby rice paddies and other feeding grounds, upper stream of Imjin river in Qangjing-myeon CCZ area.	
3	8:53	9:01	2	1	1	0	1	Good visibility	15°C. Cloudy
4	9:03	9:17	0	0	0	0	0	White-naped crane 9, Common Merganser 6	
5	9:20	9:40	0	0	0	0	0	Very good visibility	15°C, rain, Cloudy
6	10:00	11:00	0	0	0	0	0	Taiga Bean Goose 11, Little Grebe 3, Great-crested Grebe 1	16°C, rain
7	7:00	7:45	0	0	0	0	0		15°C, Cloudy
8	7:50	8:00	6	3	3	0	2	Eurasian Teal	14°C, rainfall 2mm
9	8:05	8:20	5	1	3	0	1	10 camping cars	14°C, rain, northeast wind
10	8:25	9:30	13	5	8	0	3	A stone collector	14°C, Cloudy
11	9:35	10:00	0	0	0	0	0	2 working fishermen	15°C, Cloudy
12	10:00	10:05	0	0	0	0	0	Continuous switching between rain and drizzle	15°C, northeasterly wind
Total			31	12	17		8		

Ebird records: <https://ebird.org/checklist/S153788245>

		
<p>Scaly-sided Mergansers © Sooyoung Lee</p>	<p>Scaly-sided Mergansers © Sooyoung Lee</p>	<p>Scaly-sided Mergansers © Sooyoung Lee</p>
		
<p>Section 4 scenery © Sooyoung Lee</p>	<p>Great-crested Grebe © Sooyoung Lee</p>	<p>Taiga Bean Goose © Sooyoung Lee</p>

3rd Census: Southward migration season							2023. 11. 17. Friday		
1-6Section: Sooyoung Lee, Ryang Jang							7-12 Section: Seunggwang Baek, Soojin Lee, Heesong Kim, Bujin Kim		
Counting section	Start time	End Time	Total	male	female	Imm.	Pairs	Other species and notes	Weather
1	13:15	14:15	0	0	0	0	0	Pending on pass the CCZ, Red-crowned Crane 100, White-naped Crane 200	3°C, snow
2	14:15	14:33	2	1	1	0	1	Good visibility	
3	14:35	14:50	4	2	2	0	0		
4	14:50	15:05	0	0	0	0	0	Red-crowned Crane 16, White-naped Crane 34	
5	15:05	15:30	0	0	0	0	0	Geese 200+, Common Buzzard 1	4°C, clear
6	16:00	16:50	0	0	0	0	0	Red-crowned Crane 4, Common coot 1, Common Merganser 43, Great-crested Grebe 1	2°C, cloudy
7	14:10	14:43	0	0	0	0	0	Red-crowned Crane 8, White-naped Crane 2, Common Merganser fem. 2 + ma.1	
8	14:50	15:12	14	5	9	0	5	Red-crowned Crane 2	
9	15:13	15:22	0	0	0	0	0		
10	15:23	16:00	22	9	13	0	7		2°C, clear
11	16:15	17:00	33	10	23	0	5	A flock of Common Mergansers, good visibility	
12	17:15	17:45	0	0	0	0	0	Common Merganser female 1, good visibility	
total			75	27	48	0	18		

Ebird records: <https://ebird.org/checklist/S154670362>

		
<p>Scaly-Sided Merganser © Sooyoung Lee</p>	<p>Scaly-Sided Merganser © Sooyoung Lee</p>	<p>Eurasian coot © Sooyoung Lee</p>
		
<p>investigators © Bujin Kim</p>	<p>investigators © Sooyoung Lee</p>	<p>Section 5 scenery and geese © Sooyoung Lee</p>

IV. Project pictures /video / other attachments

A.Consultation on census and translation into Korean

Nail Moores (Consultant)

President of Birds Korea

Doctor of Avian Diversity Conservation, Newcastle University, Australia

Master of Environmental Design/Ecological Design, Kyushu University, Japan

Bachelor of education, Hull University, England

Member of the IUCN SSC Endangered Species Waterbird Expert Group (2021-2025)

Sooyoung Lee (Translation)

Member of Birds Korea (Yeoncheon)

Translator specializing in publishing

Translation of " International Action Plan for the Conservation

of the Scaly-Sided Merganser *Mergus Squamatus*, 2016-2025" (EAAFP)

Participation in the Korean translation of the International Bird Database of eBird

1.Scaly-sided Merganser Survey Work

Dearest colleagues, as you already know our research has identified the Imjin River as the most important KNOWN site for the Scaly-sided Merganser on the Korean Peninsula.

Our research in Yeoncheon has made many important discoveries. We now know that the Scaly-sided Merganser is regular between late October and mid-December, and that the highest day count in both 2021 and 2022 was in mid-November. We also know that the species uses the same river stretches each migration period, depending almost entirely on nine discrete stretches of river between Pilsung Bridge and the site of the proposed new Geopark centre, all of which will be contained in the soon-to-be-designated Yeoncheon Imjin River Flyway Network Site. These river stretches ("Count Areas") are below Pilsung bridge; near to the old CCZ pump house; opposite "barking dog"; above Gunnam Dam; below Gunnam Dam (south to Buksam Bridge); along the river between Buksam and Imjin bridges, with some above and some below the artificial weir; near the mini-golf; and "Red bicycles".

The species sometimes occurs on other stretches of river in the CCZ; and is also known to be regular at Horogoru; and also occurs less often at Baekhak and upstream of Baekhak (twice at "new BBQ" and once at Mapo). We also recorded the species once on the Hantan River.

Our highest day count was 144 (in November 2021); and we know that some birds likely stay only a few hours or days, while some likely stay for several weeks.

If we want to count all along the Imjin River within the FNS, then we can organize our counts into 12 count areas (see sheet 2 of excel). This will mean we do not need to record GPS coordinates each time – unless you want to record some special information.

Some of the 12 count areas will require more than one count point (so please be careful if you see the same bird twice to only enter the number as one!).

You can enter each Count point as “CP 1 a, CP 1b etc if you want. However, the main purpose of the excel is to help us organize the data into these 12 count areas. The count points themselves are less important at this time.

We do not know, however, the total number of Scaly-sided Merganser that use the Imjin River in either the southward or northward migration period. A good estimate would be extremely helpful in helping to make a solid baseline, against which changes in number can be measured each year; and which would be extremely helpful in improving understanding of the ROK’s global importance to the species. If the counts are organized into Count Area” (each with 1 or 2 Count Points) then in future years this will help us to see how local changes to the environment are affecting their numbers and distribution.

To do this, we need to conduct counts with very strict and consistent protocols, with counts at very regular intervals (so that all the data can be put into graphs with even spaces between records)

As agreed already, the Greater Team Hosa in 2023 will therefore count all of the river within the FNS at least once every three days from October 20th to November 20th (total 10 counts). It would also be very helpful to have more frequent counts (of all or of at least some of the preferred river stretches) in addition to these counts. It would also be very helpful to have counts along lower stretches of the Imjin, also with some regularity (e.g., once every 6 days, total 5 counts).

As we all know the Scaly-sided Merganser is extremely shy and easily disturbed, especially by sudden movements and sudden sounds. Please take all measures to reduce disturbance:

1. Please keep your phones on vibrate mode (and try to ignore calls during survey work);
2. Please wear dull clothing (avoid red, white, yellow, pink, orange jackets, hats, gloves etc).
3. Please park quietly and quickly (not maneuvering to perfect the parking spot), always away from the river itself, without making any unnecessary sounds. Please do not use remote key opening; and please be really careful when closing car doors;
4. Please talk quietly and do not call out;
5. Please be careful when setting up your tripod – use your body or the car to “hide” the movement behind your body – please do not carry the tripod and scope to the river then set up!;
6. When walking near the river or near birds, please move slowly and hold your telescope and tripod close to your body, so that the tripod silhouette does not look like a shotgun;
7. Please try to use trees or poles to stand next to, so that you are less disturbing to Scalies; and keep your distance please.

Each survey, please cover all 12 main count areas (with perhaps 15-20 stops). Each time:

1. On the excel sheet, please record the date, time of survey start and survey finish; the people who you are counting with; and main weather (perhaps best taken from KMA.GO.KR, with additional commentary on e.g., fog etc).
2. Please go to the same count points within each of the 12 count areas each survey. Only change these count points if really needed (and if changing, then note the coordinates please).
3. Please one person each team immediately record the time of your arrival and the time of departure from each count area, whether or not you see any Scalies;

4. If you see Scalies, please first record the TOTAL number within each of the 12 count areas (and please enter a zero if none were in that count areas, so each survey we know all 12 count areas have been surveyed).
5. Each time you see a Scaly, for that count area please record the following information: (1) How many are males? (2) How many are adult females (long crested, with obvious scales, usually paired); and (3) How many are female-types? (in October and November it is not possible to identify immature males from immature females and from some younger females). Please also note how many pairs you think there are (some will be in pairs; and some will not be; some it will be too difficult to know).
6. Please list other bird species if you have time and are confident of the ID.
7. Please list any other issues – such as disturbance or birds flying off – in the notes column in the excel.

Thank you and please have a great experience!

2. Identification of Scaly-sided Merganser

Stages of life of a Scaly =

1. egg
2. duckling - fluffy ball stage - only seen on and near to the nest and last for a couple of weeks only.
3. juvenile - first feathered plumage. Increasingly looks like a very dull female with a much more strongly contrasting head pattern (dark lines between eye and bill). We sometimes, but rather rarely, see birds with obvious juvenile features in Korea in October.
4. Immature. Harder to define, but the plumage worn for several months, mostly from Sep-Jan in Scalies. The juvenile feathers in parts of the immature plumage seem to wear away gradually, as adult type plumage gradually gets revealed. Immature plumage is the plumage of birds born in their first calendar year (i.e., if born in 2022, then First Calendar-year until December 31st of 2022). From October onwards both immature males and females look more or less like adult females, but with: less of a crest; a duller bill with a less obvious pale tip; weaker scales on the flanks.
5. Immature still. On January 1st, we start a new calendar year (2022 becomes 2023). Immature males early in their Second Calendar-year (often written 2cy), e.g in January and February, start to show male type features. Usually this includes some darker feathers appearing on the crown and top of the head first, often visible in January and perhaps always visible by April. Immature males and immature females in their 2 cy plumage look messy (like many human teenagers): short crested; patchy plumage. Many of the feathers look worn out and old. This is because they have been in these feathers since June or July of the previous year; and immature feathers are not as strong structurally as adult feathers.
A few 2cy males by April look quite similar to adult males when seen at long range. Seen more closely the dark on the head still has patches of brown; and the white is dirty looking; the feathers look worn out. Females in their 2 cy plumage look like adult females, but still with duller bills, less scaling and a shorter crest - messy and worn out.
6. These 2 cy birds migrate later to the breeding grounds than breeding adults because they will very likely not breed.
7. In the late summer of their 2 cy like adults, I suspect that they will undergo a complete moult - replacing all the wing feathers and the head and body feathers quite rapidly. They will probably be flightless for a couple of weeks; and when they finish this moult, they likely return close to the area where they were born for a few weeks before migrating south.
By late September males in their 2cy will look very much like adult males. I guess that their crest might be shorter, but I do not know. Females in their 2 cy will look like adult females, again probably with shorter crests. Birds in this plumage are simply best to call "adults" because we probably cannot know their age unless they have a leg band.
8. Older and younger adults likely then migrate more or less together from the breeding area to Korea in Sep to Nov.
9. I guess birds that are already paired when they arrive in October and November will be older adults ("married couples"), at least three and probably more than three years old. These older adults will often stay in close pairs. Younger adults probably start to pair up during their first winter (in early 2 cy or in late 2cy). The birds actively displaying in March of any year are likely to be younger birds or less experienced young adults (perhaps in their 3cy?), hoping for their first chance to breed.
10. Either way, males follow females from the wintering area back to the breeding area; and the plumage cycles are repeated year after year.

It is important to state that Scaly-sided Merganser are a little different from most other duck species in Korea. In many ducks, the late summer moult is rather slower. Adult males cannot fly so well, so they develop a female type plumage (technically called "eclipse plumage"). In several species, e.g.. Northern Shoveler, adult males, adult females and immatures all look similar when they arrive here in Korea in October. In the case of Northern Shoveler, even older adults only develop an adult male plumage in January or February.

Scaly-sided Mergansers are much simpler to age. Less confusing.

By now, April, all immature males / 2cy males (should have much darker feathers coming through on their head. Many will look almost adult male like - just less of a crest, and some dirty look to the plumage. If the birds are still brown-headed, they will be females. If messy and short crested, 2 cy female; if long crested and clean looking with very obvious yellow bill tips, adult female.

A. Map of the Imjin River and the area of the 12 census sections

*Provided by Dr. Nial Moores, English version Excel file is omitted and translated into Korean only.

Counting Sections

Main counting sections		From	To	
1	Under the Pilsung Bridge	38.███888°, 126.███501°	38.███617°, 126.███833°	
2	Near the pump station	38.███617°, 126.███833°	38.███918°, 126.███228°	
3	"The Barking Dog"	38.███330°, 126.███491°	38.███976°, 126.███965°	
4	Mangje rapids	38.███976°, 126.███965°	38.███418°, 126.███652°	
5	Janggun rapids	38.███418°, 126.███652°	38.███548°, 127.███220°	
6	Over the dam center of water purification	38.███548°, 127.███220°	38.███504°, 127.███408°	Be careful not to double-count!
7	From Gunnam Dam to North Samgyo Bridge	38.███978°, 127.███641°	38.███049°, 127.███456°	2 count points required
8	Under the North Samgyo Bridge ("northern, narrow area")	38.███582°, 127.███903°	38.███250°, 127.███818°	At least 2 count points required: Looking south from the North Samgyo Bridge; "stop" point above the "artificial beam"
9	임진교 북쪽 ("southern, narrow area")	38.███714°, 127.███807°	38.███511°, 127.███708°	Research in one good count point and move slowly with car to check
10	Mini-Golf area	38.███908°, 127.███360°	38.███175°, 127.███732°	Drive slowly and check in detail; investigate at one major count point on the west coast and check further in "Scuba area"
11	a red bicycle/Namgye-ri/New center	38.033256°, 127.021976°	38.014347°, 127.013455°	
12	Peace Bridge	38.003599°, 127.011849°		Investigate looking north, check from direction of Mapo Bridge towards northwest
	Mapo Bridge			
	Barbecue			
	White Swan			
	Horogoruseong Fortress			
	Hantan River			

*For the preservation of sensitive habitats, some coordinates have been blacked out.



Display of the counting area on Google Maps. Courtesy of Nial Moores


4.Items to record

* Provided by Dr. Nial Moores, English version Excel file is omitted and translated into Korean only.

Scaly-sided Merganser census date; count point/location; start time; end time; total Scaly-sided Merganser population; tonal male; tonal female; "female type"; number of pairs; additional information regarding the Scaly-sided Merganser; notes; weather; members of the survey team

B.Orientation for Investigators

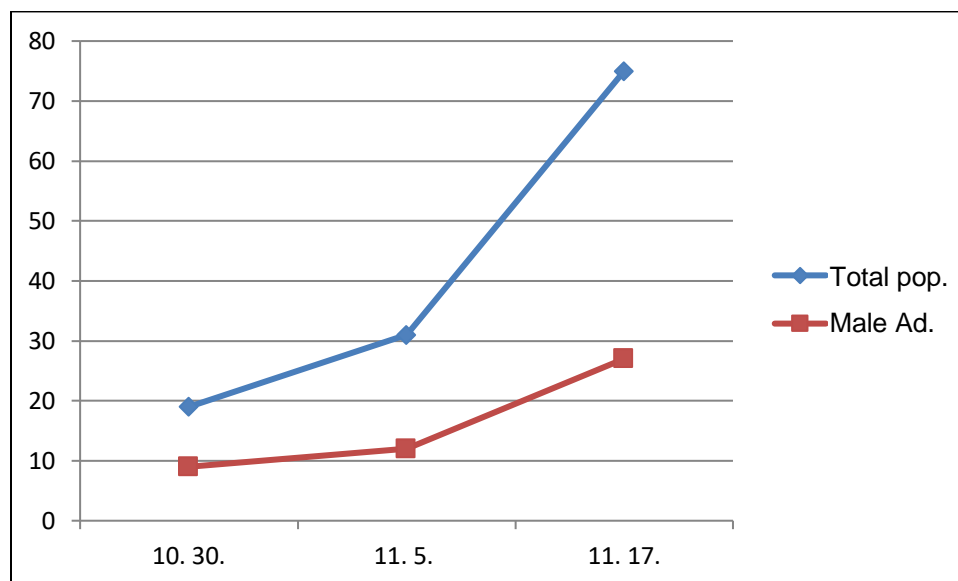
Date	2023. 10. 24. Tuesday. 16:00-18:00
Registrar	Researchers: Seunggwang Baek, Sooyoung Lee Assistant researchers: Ryang Jang, Soojin Lee, Heesong Kim, Bujin Kim
Topic	Preparation and sharing the result of consultation
Content	<ol style="list-style-type: none"> 1. The meaning of this year's Scaly-sided Merganser census <ol style="list-style-type: none"> a. Focus investigation of network sites prior to official joining of EAAFP FNS b. Expect better equipment and accumulated experience than last year 2. need- to-know basis 3. Prior learning to distinguish measures on matured, immatured, juvenile individuals

	<ul style="list-style-type: none"> a. Specific information to be included in the field record file, e.g. temperature, wind direction, visibility, disturbance factors, particularities, etc. b. Be careful not to disturb the Scaly-sided Mergansers in the field. <p>4. Why the intensive census in November is necessary</p> <ul style="list-style-type: none"> a. November is the peak period of the southward migration, and it is necessary to check the trend in population's sharp increase and decline b. Establish a baseline to understand the future development in the relationship between continuous population changes and local environmental factors c. As the population is declining in Dec, we need to focus on the November census <p>5. Team division and determination of the provisional two sections</p> <ul style="list-style-type: none"> a. 1 team has one researcher; assistant researchers may vary depending on variables such as equipment, vehicle availability, residence, and occupational activities. b. The boundary of section 2 shall be based on the Gunnam Dam, but each team shall consider and support other teams depending on the circumstances of the census date. <p>6. Census Plan for Southward Migration in 2023</p> <ul style="list-style-type: none"> a. 1st round: October 30th (Monday) 07:30~ b. 2nd round: November 5th (Sun) 07:30~ c. 3rd round: November 17th (Fri) 14:00 <p>7. 2024 Northbound Migration census date to be discussed and finalized in the new year</p>
pictures	 <p>The first photograph shows a group of about seven people sitting around a long wooden table in a meeting room. They appear to be engaged in a discussion, with some looking at documents on the table. The room has wood-paneled walls and some plants. The second photograph is a similar scene from a slightly different angle, showing the same group of people at the table. A woman's face is partially visible in the foreground on the right side of the second photo.</p>

V.Census Summary

A.2023. Summary on Southward migration census

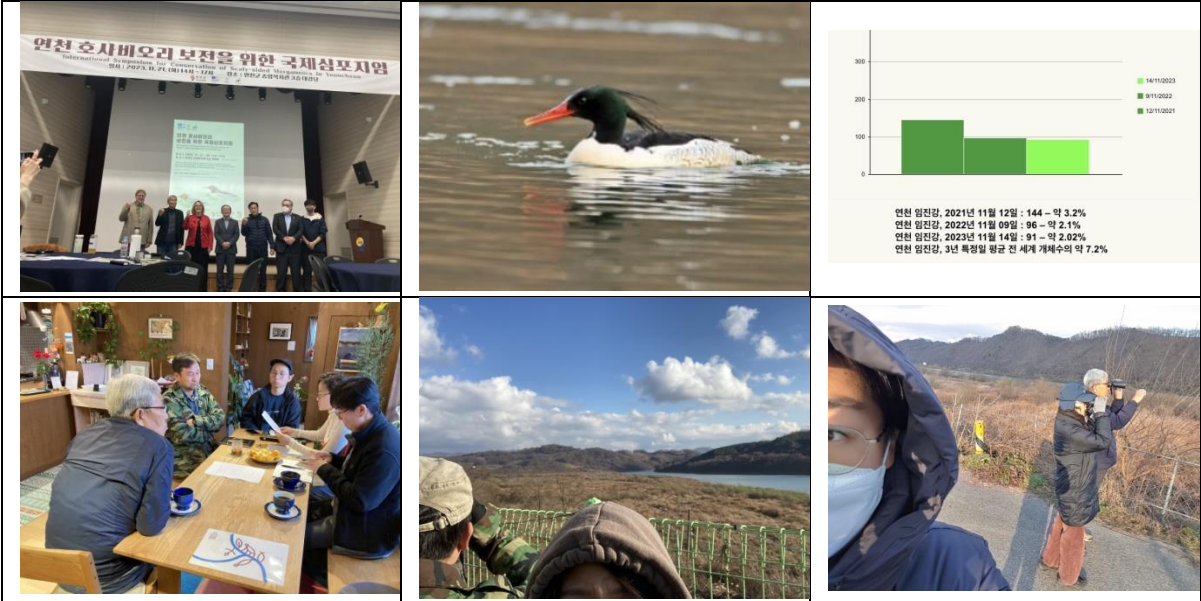
Round	Date	Total population	Male	Female	Immatured.	Pairs
1	10. 30.	19	9	4		3
2	11. 5.	31	12	17		8
3	11. 17.	75	27	48		18



< Figure 1. The total and male adult population of the 2023 Southward Migration Census >

Record and Publicity Platform	2023. 11. 22.
‘Birds Korea Yeoncheon’ Homepage http://www.yeoncheon.net	<p>11.21, "International Symposium on the Conservation of Scaly-sided Merganser" concluded with much attention and support of many residents. Yeoncheon County Office and the world's best expert NGOs and local residents are moving in one direction, preparing for a future that will come as happiness and reward for all of us.</p> <p>At least three years went into the creation of the foundation for this symposium. The Hanns Seidel Foundation and the EAAFP, who together laid the groundwork, were also present yesterday. Birds Korea Yeoncheon conducted a joint census of the Scaly-sided Merganser in the "2022-23 Winter EAAFP Private Organization Support Project" and is currently conducting a joint census of the Scaly-sided Merganser under the sponsorship of the Hans Zaidel Foundation with the "2023-24 Winter EAAFP Private Organization Support Project."</p> <p>After a preparation meeting with a guideline by EAAFP Scaly-sided Merganser Task Force Expert Dr Nial Moores the southward migrating Scaly-sided Merganser population was investigated.</p> <p>According to the researcher's observation, the sharp decline in the highest daily population from 2022 does not seem unrelated to the trimming of a section of the unused promenade along the Imjin River. If we set up screens and safe observation sites on the trails, and stop using certain sections during</p>
Instagram birds_korea_yeoncheon	
Facebook ‘새와 생명의 터 연천’ [birds korea_yeoncheon]	

the most sensitive times, wouldn't Scaly-sided Merganser of the Imjin River be able to stay more and longer?
 Scaly-sided Merganser pictures © Nial Moores
 #Hanns Seidel Foundation #EAAFP # Scaly-sided Merganser #Imjin River # biosphere reserve #habitat conservation



* Further details to be supplemented and completed after the completion of the project in 2024.

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