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WORKSHOP: BIRD BIODIVERSITY AT LAKE BUNYONYI

Leader of workshop: Tilen Basle

Lake Bunyonyi is 46 km² lake in the most south-western part of the Uganda, close to the border with Rwanda. Although lake is not proclaimed as a protected area, it harbours a rich biodiversity, especially birds. In local Rukiga language Bunyonyi translates to "Place of many little birds", which points to rich bird biodiversity. The main income for most inhabitants is farming, some small scale tourism is in development. Nature tourism has a big potential in the area and could be an important income for a local communities. The aim of the workshop was to familiarise with bird biodiversity of the area, attract local children to birdwatching and finding out what are opportunities of local communities living in a high bird biodiversity areas.

INTRODUCTION

UGANDA is known for its rich bird biodiversity as 1007 bird species have been found in the country (Carswell et al 2005), which represents about 10% of all bird species in the world. This makes Uganda a popular birdwatching destination, but birdwatching is concentrated around major Protected areas (PA) that cover around 14% of country's land surface. In recent years some PA are experiencing mass tourism that has a negative impact on the area and local communities. Shift to other biodiversity and culturally rich areas could help solve the problem and strengthen local communities.

LAKE BUNYONYI (1962 meters above the sea level) is tectonic lake characterised by steep shores and usually also great lake depth. Although Bunyonyi is sometimes credited second deepest lake in Africa (900 meters), this is not verified and official depth is around 44 meters. Lake has 29 islands and very little aquatic vegetation, that can be found only in bays with shallow water. Shallow bays form swamps dominated by papyrus *Cyperus papyrus* and, in parts, herbaceous plants. Hills around the lake were transformed to extensive fields, natural forest was completely removed and in parts replanted with Eucalypt Trees.

Area harbours around 200 bird species including: Pied kingfisher, Malachite kingfisher, Cinnamon-chested Bee eater, Bronzy sun bird, Pied wagtail, Grey shrike, Grey crowned crested crane, Hadada ibis, Swamp fly catcher, Black heron, Great cormorant, Fan-tailed widow bird, Streaky seed eater, Speckled mouse bird, Pin tailed whyder, Bronze manikin, Black-headed weaver and Golden-backed weaver. In vicinity of the lake are two national parks (Mgahinga Gorilla National Park and Bwindi Impenetrable National park) and Echuya Central Forest Reserve.

Wildlife tourism at Lake Bunyonyi is not developed, although there are some companies that offer birdwatching tours. NGO NatureUganda has an office in Kabale (7 kilometers from the lake) and experienced bird guides, but they are focused on Echuya Forest Reserve.



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WORKSHOP GOALS:

- familiarising local young with birdwatching and surveying equipment (binoculars, scope, camera, bird guide)
- understanding of surveying method (area count method)
- noting the observations, counting birds, moving data into the database
- learning about the different species of birds in the area
- identifying birds by sight (how to identify, what to look for...)
- identifying birds by sound (what to listen to, how to determine one bird from the other...)
- understanding why monitoring and preserving of bird species is important
- learning a good example practice of nature friendly tourism (birdwatching, photo safari..)
- creating a bird checklist to compare biodiversity with other areas (Slovenia, Romania)
- obtaining the skills of team work through educative tasks through the workshop
- sharing gained knowledge with local community and environmental NGO
- learning to survey birds in new environment

METHODS:

- area count bird biodiversity survey
- transect bird biodiversity survey
- determination of bird species by sight and sound
- writing the observations in the database
- creating a bird checklist
- reporting about the work in the workshop
- creating a short video clip

RESULTS

During our stay at Burimba Peninsula we've done 7 fieldwork days which included transect bird survey of Burimba Peninsula, Bwama, Bushara and Sharp's Islands and area count bird survey of various parts of lake done by boat. All observations were recorded and complete list of observed bird species was compiled. Bird checklist was also shared with local NGO NatureUganda, which is a national BirdLife International partner. In total we observed 85 bird species at Lake Bunoyonyi (Table 1). Our group also invited local young to join us during fieldwork. They had the opportunity to learn equipment handling, bird identification and different methods of bird survey. We also learned a lot of local bird names and gained insight in their community life.

Beside Lake Bunoyonyi we also visited our colleagues at NatureUganda NGO at their office in Kabale. They showed us around and took us for a birdwatching trip to Echuya Forest Central Reserve. We had the opportunity to get insight into a work of environmental NGO in Uganda, hear their struggles and success stories. It was great opportunity to share experience between two NGOs working in same sector in two totally different environments.

During last few days of our youth exchange we also visited Kalinzu Forest (known for its chimpanzee trekking) and Queen Elizabeth National Park. Because of the change in the habitat (montane forest and



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savannah) we were able to observe quite a lot of new bird species. Total number of observed bird species in Uganda was 212 (Table 2).

Beside bird species we also observed quite a lot of other interesting animal species. At Lake Bunyonyi we spotted Spotted-necked Otter and in Echuya Forest we saw Olive Baboon and heard Gentle Monkey. At Kalinzu Forest we saw Common Chimpanzee (subspecies *schweinfurthii*). Queen Elizabeth National Park was a feast for the eyes and beside many new bird species we also observed: African Buffalo, Waterbuck, Common Hippopotamus, Common Warthog, Ugandan Kob, Nile Crocodile, African Bush Elephant and a Lion.

Table 1: Bird species observed at Lake Bunyonyi (Uganda) during youth exchange

No.	Species	34	Red-billed Firefinch
1	Hadada Ibis	35	Black-headed Weaver
2	Pied Crow	36	Sharpe's Starling
3	Red-eyed Dove	37	Speckled Mousebird
4	Grey-headed Sparrow	38	Wahlberg's Eagle
5	Grey Crowned Crane	39	Streaky Seed-eater
6	Long-tailed Cormorant	40	White-browed Robin-chat
7	Black-headed Heron	41	Slender-billed Weaver
8	African Pied Wagtail	42	White-tailed Blue Flycatcher
9	Cape Wagtail	43	Mackinnon's Fiscal
10	Pied Kingfisher	44	Arrow-marked Babbler
11	Common Bulbul	45	Common Waxbill
12	Stonechat	46	Yellow-billed Duck
13	Angolan Swallow	47	Long-billed Pipit
14	Purple Heron	48	African Thrush
15	Bronze Mannikin	49	Tropical Boubou
16	Bronze Sunbird	50	Grey-capped Warbler
17	Red-chested Sunbird	51	Black-and-white Mannikin
18	Cinnamon-chested Bee-eater	52	Holub's Golden Weaver
19	Ring-necked Dove	53	Black-lored Babbler
20	African Marsh Harrier	54	Great Cormorant
21	Black Crake	55	Scarlet-chested Sunbird
22	White-headed Saw-wing	56	Malachite Kingfisher
23	Augur Buzzard	57	Red-capped Robin-chat
24	African Harrier-hawk	58	Red-breasted Cuckoo
25	White-naped Raven	59	Pink-backed Pelican
26	Common Fiscal	60	Rwenzori Nightjar
27	Rock Martin	61	Brown-crowned Tchagra
28	African Golden-breasted Bunting	62	Black-faced Canary
29	Baglafaecht Weaver	63	African Hobby
30	Yellow White-eye	64	African Golden Oriole
31	African Paradise Flycatcher	65	Black Kite
32	Tawny-flanked Prinia	66	Common Sandpiper
33	African Firefinch	67	Yellow-throated Greenbul



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Table 2:	Bird species	observed	in	Uganda	during	youth	exchange
68	Bat Hawk			77			Common Moorhen
69	Fan-tailed Widowbird			78			Little Grebe
70	Pin-tailed Whydah			79			African Jacana
71	Grey Woodpecker			80			Red-knobbed Coot
72	Chub's Cisticola			81			Viellot's Black Weaver
73	Ashy Flycatcher			82			Ruepell's Griffon Vulture
74	African Hill Babbler			83			Blue-headed Coucal
75	Black-headed Waxbill			84			Snowy-headed Robin-chat
76	Hottentot Teal			85			Marsh Flycatcher
No.	Species						
1	Laughing Dove			34			Bronze Sunbird
2	Reef Egret			35			Red-chested Sunbird
3	African Palm Swift			36			Cinnamon-chested Bee-eater
4	Little Swift			37			Ring-necked Dove
5	Openbill Stork			38			African Marsh Harrier
6	Hadada Ibis			39			Black Crake
7	Pied Crow			40			White-headed Saw-wing
8	Red-eyed Dove			41			Augur Buzzard
9	White-rumped Swift			42			African Harrier-hawk
10	Marabou Stork			43			White-naped Raven
11	Grey-headed Sparrow			44			Common Fiscal
12	Ruepell's Long-tailed Starling			45			Rock Martin
13	Tawny Eagle			46			African Golden-breasted Bunting
14	Grey-backed Fiscal			47			Baglafaecht Weaver
15	Spur-winged Lapwing			48			Yellow White-eye
16	Palm-nut Vulture			49			African Paradise Flycatcher
17	Black-winged Kite			50			Tawny-flanked Prinia
18	Grey Crowned Crane			51			African Firefinch
19	Sacred Ibis			52			Red-billed Firefinch
20	Long-tailed Cormorant			53			Black-headed Weaver
21	Black-headed Heron			54			Sharpe's Starling
22	Blue-throated Roller			55			Speckled Mousebird
23	African Pied Wagtail			56			Wahlberg's Eagle
24	Cape Wagtail			57			Streaky Seed-eater
25	Black-and-white Casqued Hornbill			58			White-browed Robin-chat
26	Long-crested Eagle			59			Slender-billed Weaver
27	Pied Kingfisher			60			White-tailed Blue Flycatcher
28	Common Bulbul			61			Mackinnon's Fiscal
29	Stonechat			62			Arrow-marked Babbler
30	Shikra			63			Common Waxbill
31	Angolan Swallow			64			Yellow-billed Duck
32	Purple Heron			65			Cassie's Grey Flycatcher
33	Bronze Mannikin			66			African Green Pigeon
				67			Long-billed Pipit



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68	African Thrush	113	African Jacana
69	Tropical Boubou	114	Red-knobbed Coot
70	Grey-capped Warbler	115	Viellot's Black Weaver
71	Black-and-white Mannikin	116	Ruepell's Griffon Vulture
72	Holub's Golden Weaver	117	Speckled Tinkerbird
73	Black-lored Babbler	118	Mountain Golden Oriole
74	Great Cormorant	119	Black-faced Rufous Warbler
75	Scarlet-chested Sunbird	120	Honeyguide Greenbul
76	Malachite Kingfisher	121	Great Blue Turraco
77	Red-capped Robin-chat	122	Red-tailed Greenbul
78	Red-breasted Cuckoo	123	Scoley-breasted Illadopsis
79	Pink-backed Pelican	124	White-headed Wood-hoopoe
80	Rwenzori Nightjar	125	Yellow-spotted Barbet
81	Brown-crowned Tchagra	126	Lueder's Bush Shrike
82	Black-faced Canary	127	Toro Olive Greenbul
83	African Hobby	128	Olive-bellied Sunbird
84	African Golden Oriole	129	Yellow-billed Strok
85	Black Kite	130	Black-and-white Shrike-flycatcher
86	Common Sandpiper	131	Grey Apalis
87	Yellow-throated Greenbul	132	African Fish Eagle
88	Bat Hawk	133	Black-headed Gonolek
89	Fan-tailed Widowbird	134	Hamerkop
90	Pin-tailed Whydah	135	Black-winged Stilt
91	Grey Woodpecker	136	Little Egret
92	Sooty Boubou	137	Egyptian Goose
93	Olive Pigeon	138	Wood Sandpiper
94	Chub's Cisticola	139	Three-banded Plover
95	Ashy Flycatcher	140	Woodland Kingfisher
96	African Hill Babbler	141	White-browed Coucal
97	Red-faced Woodland Warbler	142	Blue-headed Coucal
98	Regal Sunbird	143	Collared Pratincole
99	Dohertie's Bush Shrike	144	Crowned Lapwing
100	Tambourine Dove	145	African Wattled Lapwing
101	Grauer's Rush Warbler	146	Senegal Lapwing
102	White-starred Robin	147	Red-necked Spurfowl
103	Yellow-rumped Tinkerbird	148	Black-bellied Bustard
104	African Dusky Flycatcher	149	Kittlitz's Plover
105	Rwenzori Batis	150	Yellow-billed Oxpecker
106	Banded Prinia	151	Yellow-throated Longclaw
107	Black-headed Waxbill	152	Lapped-faced Vulture
108	Yellow-crowned Canary	153	White-headed Vulture
109	House Sparrow	154	Wooley-necked Stork
110	Hottentot Teal	155	White-backed Vulture
111	Common Moorhen	156	Lesser Flamingo
112	Little Grebe	157	White Pelican



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158	Striated Heron	186	African Hoopoe
159	Squacco Heron	187	Rufous-napped Lark
160	Intermediate Heron	188	Barn Swallow
161	Great Egret	189	Snowy-headed Robin-chat
162	Grey Heron	190	Southern Red Bishop
163	African Spoonbill	191	Black Coucal
164	Knobb-billed Duck	192	Zitting Cisticola
165	Grey Kestrel	193	Grey-backed Camaroptera
166	Bateleur	194	Coqui Francolin
167	Crested Francolin	195	Owambo Sparrowhawk
168	African Corncrake	196	White-chinned Prinia
169	Water Thick-knee	197	Black-crowned Tchagra
170	Cattle Egret	198	Blue-spotted Wood-dove
171	Temminck's Courser	199	African Blue Flycatcher
172	Ruff	200	Marsh Flycatcher
173	Marsh Sandpiper	201	House Pigeon
174	Greenshank	202	Dobble-toothed Barbet
175	Turnstone	203	Ross's Turraco
176	Little Stint	204	Eastern Grey Plantain-eater
177	Grey-headed Gull	205	Crowned Hornbill
178	Lesser Black-backed Gull	206	Brown Parrot
179	Heuglin's Gull	207	Red-rumped Swallow
180	White-winged Tern	208	Brown-throated Wattle-eye
181	Swamp Nightjar	209	Chin-spot Batis
182	Blue-naped Mousebird	210	Gull-billed Tern
183	Grey-headed Kingfisher	211	Northern Black Flycatcher
184	Little Bee-eater	212	Common Myna
185	White-throated Bee-eater		



Photo 1: Birdwatching with NatureUganda ornithologist at Echuca Central Forest Reserve (Photo: Tilen Basle)



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Photo 2: Grey Crowned Crane (Photo: Tilen Basle)



Photo 3: Stonechat (Photo: Rok Lobnik)



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DISCUSSION

Area of Lake Bunyonyi is rich in bird biodiversity and has a great nature tourism potential. 85 observed bird species may not seem high, but considering area size, lack of information and specialised local guide it is quite an achievement. Detailed information on number and distribution of bird species in the area is lacking and bird survey is needed. Training of local birdwatching guides and volunteers is needed and production of simple leaflets would help attract tourists. Accommodation is available, but offer of nature activities is lacking, part due to lack of knowledge. Local schools are great potential to make necessary knowledge available to children. NGOs may help, as NatureUganda has a good network of birding youth clubs.

During our youth exchange we noticed great interest for nature and birds among young. They were keen to know more about birds and most already had some knowledge of locally common bird species. All that is needed is ecological (Why are birds important? Why study birds?) and economic approach (How can bird tourism benefit our community? What is nature and bird friendly tourism?) and its implementation in existing system. We need to be aware not to force our ideas upon them, as they might not work in existing social, cultural and politic system. Knowledge and good practice cases need to be available to them and encouraged by teachers, parents and local NGOs. We noticed that and that is why we left all our guidebooks and education material at Lake Bunyonyi. It will help them more than it would us back in Slovenia.

LITERATURE

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