

Kanuti NWR Trip Report June 2014 Kanuti Canyon and Kanuti Lake BBSs

Purposes: Conduct Kanuti Canyon and Kanuti Lake Breeding Bird Surveys (BBSs)

Location: Kanuti River

Dates: June 11–14, 2014

Participants: Chris Harwood, Neal Wepking

Authors: Chris Harwood

Report Date: July 22, 2014

Summary:

Wildlife Biologist Harwood (observer and driver) and volunteer Wepking conducted the Kanuti Canyon BBS on June 13, 2014 and the Kanuti Lake BBS on June 14, 2014. A total of 447 individuals were recorded of 40 species on the Canyon survey, while 481 individuals of 42 species were recorded on the Lake survey. High river levels from copious rain in June both positively and negatively affected survey logistics.

Daily Activities:

June 11: We departed the cabin at 09:00 in the Honda 20 hp prop boat with a completely filled 15-gal poly jug and partially filled (i.e., 6–7 gal) 15-gal metal drum to cache along the way. The river was as high as Harwood had ever seen it during his BBS experience (2003–08, 2014). There were very few sandbars, and the larger ones (e.g., like Bob’s and Curt’s bars) had <10 m of sand showing. It rained frequently during the trip down. The boat performed well (>15 mph), aided by a faster than normal current, but hindered by a southwesterly wind. In parts of the canyon, the current was 5 mph. No gravel bars or riffles were exposed in the canyon, with little room to walk on the banks. We continued through the canyon and past the refuge boundary to check the sandbar that we typically camp on. As this was underwater, we continued downriver and met up with four men from Allakaket getting house logs on the north side of river. By now it was pouring, making driving more difficult, so we turned around and made camp on west side of river between points 1 and 2 in the late afternoon. The rain let up in early evening and we were able to dry out a bit.

June 12: We awoke at 01:45 and deemed the weather marginal, but adequate, to survey. We broke camp under a few raindrops at 02:00; however, sprinkles turned to drizzle by survey time at 03:00. We completed the first 5 points but it was light rain by point #6 and no bird activity was observed. We waited 15 min for rain to subside; when it didn’t, we aborted the survey, returned to our camp site, made camp again, and went back to sleep. It continued to rain through the morning, gradually lessening by 09:00. By afternoon it was actually nice and we were able to dry everything that had been re-soaked. In the evening, the wind shifted to northerly, bringing cooler, clearer weather.

June 13: We awoke at 01:45 to largely clear skies with temperatures in the low 40’s. By 03:00, fog started to build on the river and it persisted through the bottom half of the survey. Although the fog slowed driving and navigation a bit, it was never so thick as to require us to wait for it to dissipate. The survey was also slowed by the faster current and smaller motor, although docking at points was facilitated by the high water. It was clear that traditional locations of some points at gravel bars had to be moved inland because gravel bars were under water and the shore was as much as 50 m inland. Hearing birds during the survey was compromised a bit by the frequent (32%) and unprecedented occurrence of waterfalls, loud drainages, runoff, etc., near survey points. We completed the survey at 08:45, which was later than typical, due in part to the reasons provided. Survey conditions were generally favorable (i.e., no rain, little to no wind), but for the drainage noise. After the survey, we retrieved the 7 gal of gas we had cached at point #50 and proceeded upriver to “Bob’s Bar” to camp.

As it was still underwater, we returned to point #1 of the Kanuti Lake route and camped directly across from the point in the woods. To this point we had used <13 gal of mogas. We poured the cached gas into the polyjug to give us approximately 9 gal to finish the survey.

June 14: We awoke at 01:45 to fairly light to no wind, and scattered skies. We completed the first 5 points under good survey conditions, but NE winds were building. Points #6-9 were completed under fairly windy conditions, making hearing difficult, and with a seemingly waning of birds singing too. We waited at point #9 for 5 min for the wind to lessen, but it did not. We were about to again postpone the survey but proceeded to point #10, where the wind was now absent, being now on the lee side (i.e., south) of the “Kanuti Hills” that run east to west on the north side of the river. Good survey conditions continued throughout the remaining points, until about the Kanuti Cabin area, where it began to get windier. We finished the survey at 09:18 to fair skies and winds within prescription and returned to the cabin. We had approximately 3 gal of gas left from the 21–22 gal we carried.

BBS Results:

On the Kanuti Canyon route (Fig. 2), we tallied 447 individuals of 40 species (Table 1). On the Kanuti Lake route (Fig 1.), we recorded 481 individuals of 42 species (Table 2). Total individuals detected/recorded were the fewest for both routes during the Harwood’s previous years as observer (i.e., 2004–2008). Total individuals and total species both exceeded totals for 2012–2013 when Wildlife Biologist Dillard conducted the routes. We used approximately 18–19 gal of mogas over four days so the survey cost approximately \$300 (i.e., \$200 for gas, \$100 for food/boat incidentals).

Discussion Points

1. Copious rain throughout the Kanuti River watershed prior to and during the survey effort caused the river to rise to levels not seen during Harwood’s tenure as observer. The high water afforded us the opportunity to eschew the troublesome (i.e., difficult to start) Yamaha jet motor and use the more reliable Honda motor, even for the shallower Canyon route. Although somewhat slower, the greater reliability of the Honda was seen as a positive trade-off. In more typical years with lower water, a jet motor will again be necessary for conducting especially the canyon route.
2. The Kanuti Lake route continues to run long no matter what efficiencies the crew employs. The fact that the points are supposed to be 0.5 mi apart becomes increasingly problematic as the river becomes increasingly more sinuous, with a consequential increase in transit time between points. Harwood will investigate the possibility of reducing the length of the survey by inquiring of BBS officials as to the possibility of moving some of the last points to appropriate locations within these longer transit portions. The 0.5-mi inter-stop distance is in place to avoid double-counting individuals. In practice, only a few, very loud species (e.g., Olive-sided Flycatcher, American Robin) are of such concern. Shortening the prescribed distance between a few points to reduce the overall survey time would not materially affect counting of most species and/or individuals.
3. Total individuals and species detected were at or near all-time lows for Harwood’s tenure as observer. When one compares the prior two years with Dillard as observer versus those conducted by Harwood, there appears to be some observer bias, with Harwood’s totals for individuals and species often markedly exceeding those of the relatively inexperienced Dillard. However, low totals during Dillard’s tenure, especially in 2013, may have been due in part to a historically late and cold spring. To what extent this year’s rainy June, and possible reduced recruitment from 2013, contributed to Harwood’s lowest individual totals for both routes is similarly unknown.
4. With staffing shortfalls and Wepking lacking boat training, Harwood served as both observer and driver. Other than making navigation more challenging (having to check GPS *and* drive), this was not problematic, especially given that shoreline docking was made easier with the high water. However, the increased current speed often necessitated greater effort by Wepking to hold the boat stationary at shore.

Table 1. Species detected on the Kanuti Canyon BBS, Kanuti NWR, Alaska. June 2006–2014. Table includes only species detected during official point counts.

Species	Individuals						Stops					
	2006	2007	2008	2012	2013	2014	2006	2007	2008	2012	2013	2014
Gr. White-fronted Goose	0	4	0	19	4	9	0	2	0	10	3	3
Canada Goose	2	1	2	4	0	0	2	1	2	2	0	0
Trumpeter Swan	0	0	1	0	2	0	0	0	1	0	1	0
American Wigeon	37	4	6	0	4	4	1	2	4	0	3	2
Mallard	0	0	0	0	0	0	0	0	0	0	0	0
Northern Shoveler	0	2	9	0	2	0	0	1	2	0	1	0
Northern Pintail	0	0	0	0	0	0	0	0	0	0	0	0
Green-winged Teal	0	0	4	18	0	0	0	0	2	2	0	0
Canvasback	0	0	0	0	0	0	0	0	0	0	0	0
Ring-necked Duck	0	0	0	0	0	0	0	0	0	0	0	0
Lesser Scaup	0	2	0	0	0	0	0	1	0	0	0	0
Harlequin Duck	0	0	0	0	0	1	0	0	0	0	0	1
White-winged Scoter	0	0	0	0	0	0	0	0	0	0	0	0
Bufflehead	0	1	0	0	0	0	0	1	0	0	0	0
Common Goldeneye	0	0	0	0	0	0	0	0	0	0	0	0
Common Merganser	2	0	2	0	0	0	1	0	1	0	0	0
Red-breasted Merganser	2	5	2	0	0	4	1	2	1	0	0	2
Ruffed Grouse	1	0	1	0	0	0	1	0	1	0	0	0
Red-throated Loon	0	0	1	0	0	0	0	0	1	0	0	0
Common Loon	0	0	0	0	0	0	0	0	0	0	0	0
Osprey	0	0	0	1	0	1	0	0	0	1	0	1
Bald Eagle	0	0	0	0	0	0	0	0	0	0	0	0
Northern Harrier	0	0	0	0	0	0	0	0	0	0	0	0
Northern Goshawk	0	0	0	0	0	0	0	0	0	0	0	0
Red-tailed Hawk	2	0	0	0	0	1	2	0	0	0	0	1
Sandhill Crane	2	2	1	2	0	2	1	1	1	1	0	1
Semipalmated Plover	0	1	0	0	2	0	0	1	0	0	1	0
Spotted Sandpiper	28	19	41	3	3	34	22	13	28	3	2	26
Solitary Sandpiper	1	6	0	0	1	0	1	5	0	0	1	0
Lesser Yellowlegs	0	2	1	0	20	1	0	2	1	0	14	1
Upland Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0
Least Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0
Wilson's Snipe	3	3	4	1	0	1	3	3	4	1	0	0
Long-tailed Jaeger	0	0	0	0	0	0	0	0	0	0	0	0
Mew Gull	0	1	0	0	2	0	0	1	0	0	2	0
Herring Gull	0	1	0	3	2	2	0	1	0	3	2	2
Glaucous-winged Gull	1	0	0	0	0	0	1	0	0	0	0	0
Great Horned Owl	2	3	1	1	0	1	2	3	1	1	0	1
Northern Hawk Owl	0	0	1	0	0	0	0	0	1	0	0	0
Belted Kingfisher	5	0	1	0	1	2	5	0	1	0	1	2
Downy Woodpecker	0	0	0	0	0	0	0	0	0	0	0	0
Three-toed Woodpecker	0	0	1	0	0	0	0	0	1	0	0	0
Black-back. Woodpecker	0	0	0	0	0	0	0	0	0	0	0	0

Table 1 (cont.). Species detected on the Kanuti Canyon BBS, Kanuti NWR, Alaska. June 2006–2014. Table includes only species detected during official point counts.

Species	Individuals						Stops					
	2006	2007	2008	2012	2013	2014	2006	2007	2008	2012	2013	2014
Northern Flicker	1	0	1	0	0	0	1	0	1	0	0	0
American Kestrel	1	0	0	0	0	0	1	0	0	0	0	0
Merlin	2	0	1	0	0	0	1	0	1	0	0	0
Peregrine Falcon	0	4	1	2	3	1	0	3	1	2	2	1
Olive-sided Flycatcher	0	5	1	0	0	1	0	4	1	0	0	1
Western Wood-Pewee	0	0	0	1	0	0	0	0	0	1	0	0
Yellow-bellied Flycatcher	0	0	5	3	5	3	0	0	4	2	5	2
Alder Flycatcher	52	72	43	59	54	42	24	28	16	30	30	21
Hammond's Flycatcher	9	14	17	9	2	7	6	10	9	7	2	6
Gray Jay	5	8	8	1	5	4	4	7	8	1	5	4
Common Raven	4	5	4	2	2	0	3	4	2	1	2	0
Tree Swallow	1	0	2	0	0	0	1	0	1	0	0	0
Violet-green Swallow	15	8	13	0	0	2	6	3	4	0	0	2
Bank Swallow	18	17	25	0	12	6	4	3	6	0	1	4
Cliff Swallow	0	0	1	14	2	0	0	0	1	3	1	0
Black-capped Chickadee	0	0	0	0	7	0	0	0	0	0	7	0
Boreal Chickadee	5	5	4	3	0	2	4	5	3	2	0	2
Ruby-crowned Kinglet	8	7	3	1	3	6	7	7	2	1	2	5
Arctic Warbler	1	1	0	0	0	0	1	1	0	0	0	0
Townsend's Solitaire	9	4	2	0	0	3	8	4	2	0	0	3
Gray-cheeked Thrush	0	1	0	0	0	0	0	1	0	0	0	0
Swainson's Thrush	136	108	92	35	34	112	50	49	44	26	26	47
Hermit Thrush	1	2	2	11	3	4	1	1	2	8	3	3
American Robin	21	26	23	4	12	9	16	20	21	4	10	9
Varied Thrush	5	0	13	0	0	1	4	0	9	0	0	1
Bohemian Waxwing	0	1	0	0	1	1	0	1	0	0	1	1
Northern Waterthrush	38	18	19	9	9	15	23	12	14	8	5	8
Orange-crowned Warbler	39	81	92	28	42	34	25	42	41	19	31	25
Yellow Warbler	9	6	6	6	7	6	7	5	5	4	6	5
Yellow-rumped Warbler	21	19	7	8	14	14	14	12	6	7	12	10
Blackpoll Warbler	0	0	0	2	2	0	0	0	0	2	2	0
Wilson's Warbler	23	19	21	3	15	4	16	14	13	3	12	4
American Tree Sparrow	0	0	1	0	0	0	0	0	1	0	0	0
Savannah Sparrow	0	0	0	0	0	0	0	0	0	0	0	0
Fox Sparrow	1	9	2	0	0	2	1	8	2	0	0	2
Lincoln's Sparrow	9	17	13	2	3	11	5	10	8	2	2	8
White-crowned Sparrow	30	18	11	4	11	15	16	13	8	4	9	13
Dark-eyed Junco	62	55	48	36	6	66	32	33	30	20	5	40
Rusty Blackbird	1	0	1	0	0	0	1	0	1	0	0	0
Pine Grosbeak	0	0	0	0	0	0	0	0	0	0	0	0
White-winged Crossbill	6	0	5	0	0	6	2	0	5	0	0	2
Common Redpoll	10	7	5	19	11	7	8	6	4	9	5	6
TOTAL Individuals	631	594	571	314	308	447						
TOTAL Species	43	43	50	32	35	40						

Table 2. Species detected on the Kanuti Lake BBS, Kanuti NWR, Alaska. June 2006–2014. Table includes only species detected during official point counts.

Species	Individuals						Stops					
	2006	2007	2008	2012	2013	2014	2006	2007	2008	2012	2013	2014
Gr. White-fronted Goose	5	9	17	3	9	8	4	4	7	2	4	4
Canada Goose	1	14	4	16	3	0	1	6	1	6	2	0
Trumpeter Swan	1	4	1	2	0	4	1	2	1	2	0	3
American Wigeon	8	9	6	0	19	9	5	7	5	0	10	6
Mallard	4	8	0	0	0	5	2	2	0	0	0	4
Northern Shoveler	25	0	1	0	2	2	1	0	1	0	1	1
Northern Pintail	3	0	0	0	0	0	1	0	0	0	0	0
Green-winged Teal	8	1	3	0	0	0	3	1	3	0	0	0
Canvasback	0	0	0	2	0	0	0	0	0	1	0	0
Ring-necked Duck	0	0	1	0	0	0	0	0	1	0	0	0
Lesser Scaup	2	0	0	5	7	1	1	0	0	3	4	1
Harlequin Duck	0	0	0	0	0	0	0	0	0	0	0	0
White-winged Scoter	0	0	0	1	0	0	0	0	0	1	0	0
Bufflehead	0	0	3	0	0	3	0	0	2	0	0	1
Common Goldeneye	2	0	1	3	0	1	2	0	1	2	0	1
Common Merganser	0	0	0	0	0	0	0	0	0	0	0	0
Red-breasted Merganser	0	0	0	0	0	0	0	0	0	0	0	0
Ruffed Grouse	0	0	0	0	0	0	0	0	0	0	0	0
Red-throated Loon	0	0	0	0	0	0	0	0	0	0	0	0
Common Loon	2	0	1	1	0	1	2	0	1	1	0	1
Osprey	0	0	0	0	0	1	0	0	0	0	0	1
Bald Eagle	1	0	0	1	0	0	1	0	0	1	0	0
Northern Harrier	0	0	0	1	0	0	0	0	0	1	0	0
Northern Goshawk	0	1	0	0	0	0	0	1	0	0	0	0
Red-tailed Hawk	0	0	1	2	0	1	0	0	1	2	0	1
Sandhill Crane	1	0	4	2	0	0	1	0	4	1	0	0
Semipalmated Plover	0	0	0	0	0	0	0	0	0	0	0	0
Spotted Sandpiper	12	8	6	3	4	7	10	5	4	3	4	4
Solitary Sandpiper	1	4	9	0	0	0	1	2	8	0	0	0
Lesser Yellowlegs	3	6	7	6	2	3	3	5	6	6	2	3
Upland Sandpiper	0	0	0	0	0	0	0	0	0	0	0	0
Least Sandpiper	0	0	0	0	0	1	0	0	0	0	0	1
Wilson's Snipe	15	19	27	12	9	10	14	18	24	9	9	9
Long-tailed Jaeger	2	0	0	0	0	0	1	0	0	0	0	0
Mew Gull	1	0	0	0	0	0	1	0	0	0	0	0
Herring Gull	1	0	0	0	0	1	1	0	0	0	0	1
Glaucous-winged Gull	0	0	0	0	0	0	0	0	0	0	0	0
Great Horned Owl	0	0	0	1	0	0	0	0	0	1	0	0
Northern Hawk Owl	0	0	0	1	0	1	0	0	0	1	0	1
Belted Kingfisher	2	0	0	0	0	0	1	0	0	0	0	0
Downy Woodpecker	1	0	0	0	1	0	1	0	0	0	1	0
Three-toed Woodpecker	2	1	0	0	0	0	2	1	0	0	0	0
Black-back. Woodpecker	0	0	0	0	0	0	0	0	0	0	0	0

Table 2 (cont.). Species detected on the Kanuti Lake BBS, Kanuti NWR, Alaska. June 2006–2014. Table includes only species detected during official point counts.

Species	Individuals						Stops					
	2006	2007	2008	2012	2013	2014	2006	2007	2008	2012	2013	2014
Northern Flicker	0	0	0	0	0	1	0	0	0	0	0	1
American Kestrel	0	0	0	0	0	0	0	0	0	0	0	0
Merlin	0	0	0	0	0	0	0	0	0	0	0	0
Peregrine Falcon	0	0	0	0	0	0	0	0	0	0	0	0
Olive-sided Flycatcher	22	27	21	12	8	18	21	25	17	11	7	17
Western Wood-Pewee	4	1	8	1	1	4	4	1	6	1	1	4
Yellow-bellied Flycatcher	0	0	0	0	1	0	0	0	0	0	1	0
Alder Flycatcher	60	61	62	62	36	54	26	31	33	37	26	26
Hammond's Flycatcher	0	0	0	0	0	0	0	0	0	0	0	0
Gray Jay	10	18	22	1	5	10	10	18	18	1	5	8
Common Raven	1	2	1	0	0	0	1	2	1	0	0	0
Tree Swallow	4	0	4	1	1	1	3	0	4	1	1	1
Violet-green Swallow	0	0	0	0	0	0	0	0	0	0	0	0
Bank Swallow	3	0	1	0	0	0	2	0	1	0	0	0
Cliff Swallow	0	0	0	0	0	0	0	0	0	0	0	0
Black-capped Chickadee	0	1	0	0	3	0	0	1	0	0	3	0
Boreal Chickadee	1	3	5	6	0	5	1	3	4	5	0	4
Ruby-crowned Kinglet	35	34	20	16	9	14	25	23	17	10	8	13
Arctic Warbler	0	0	0	0	0	0	0	0	0	0	0	0
Townsend's Solitaire	0	0	0	0	0	0	0	0	0	0	0	0
Gray-cheeked Thrush	1	0	0	0	0	0	1	0	0	0	0	0
Swainson's Thrush	133	93	125	61	35	103	49	42	47	36	22	45
Hermit Thrush	0	0	0	0	0	0	0	0	0	0	0	0
American Robin	17	31	18	36	34	16	16	28	16	28	27	14
Varied Thrush	8	11	16	2	0	2	7	10	11	1	0	2
Bohemian Waxwing	4	3	7	0	0	2	4	3	5	0	0	2
Northern Waterthrush	26	20	19	8	5	20	16	12	14	6	5	13
Orange-crowned Warbler	16	46	25	15	9	15	11	29	15	10	7	10
Yellow Warbler	7	5	16	13	7	13	5	5	10	11	5	9
Yellow-rumped Warbler	58	45	49	15	24	32	31	27	30	11	19	24
Blackpoll Warbler	1	0	3	2	0	1	1	0	3	2	0	1
Wilson's Warbler	9	3	8	1	6	2	6	3	6	1	5	2
American Tree Sparrow	0	0	0	0	0	0	0	0	0	0	0	0
Savannah Sparrow	1	0	2	0	0	0	1	0	2	0	0	0
Fox Sparrow	3	5	3	3	5	1	2	5	3	2	4	1
Lincoln's Sparrow	20	28	23	10	6	16	17	22	12	7	5	11
White-crowned Sparrow	41	40	42	25	6	24	24	28	27	17	6	20
Dark-eyed Junco	83	39	67	36	11	44	40	26	36	26	8	30
Rusty Blackbird	2	1	2	3	3	3	2	1	2	2	2	2
Pine Grosbeak	0	2	1	0	0	0	0	2	1	0	0	0
White-winged Crossbill	32	5	28	0	1	14	6	5	13	0	1	4
Common Redpoll	11	11	10	7	27	7	11	11	9	6	10	6
TOTAL Individuals	716	619	700	398	299	481						
TOTAL Species	51	37	44	39	31	42						

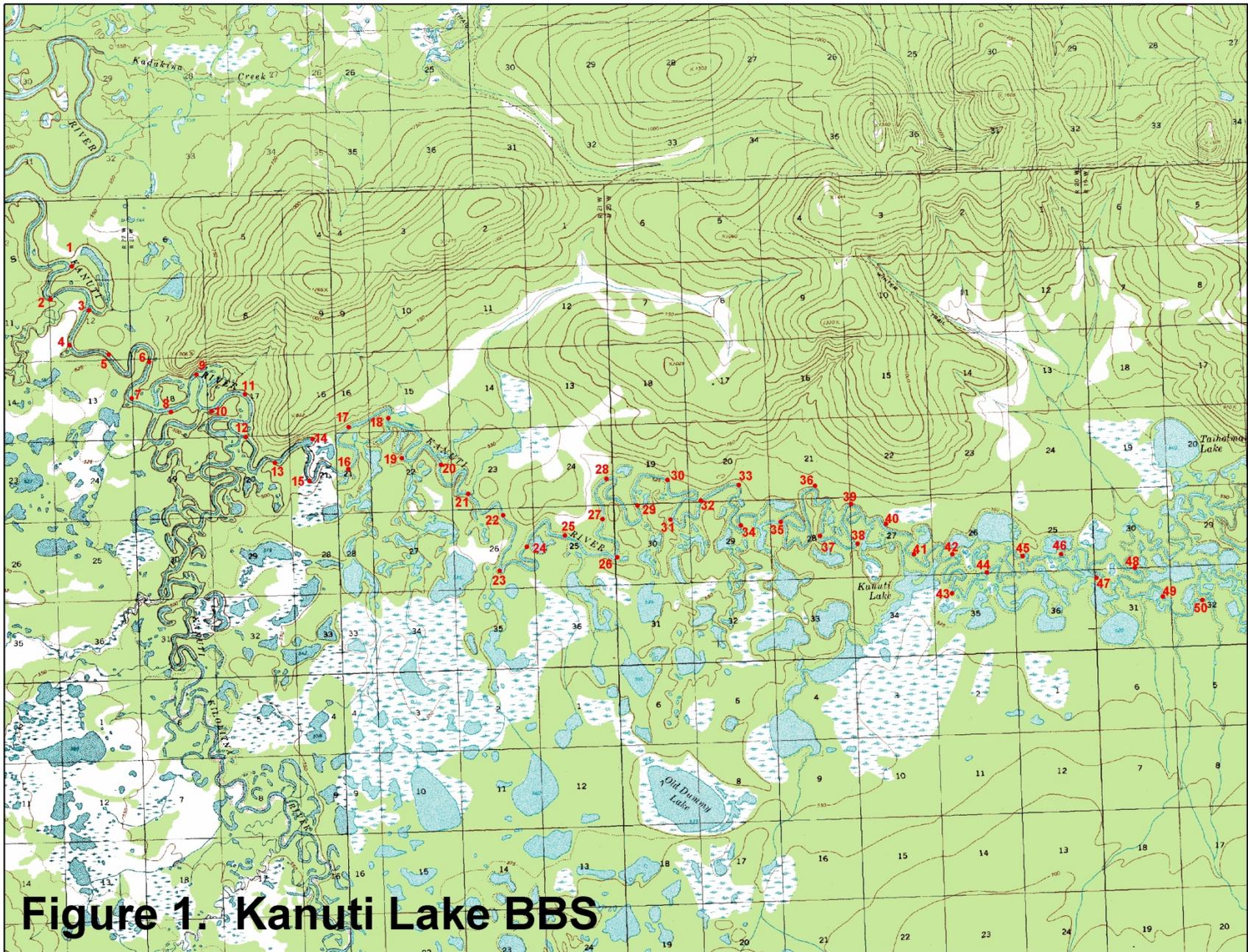


Figure 1. Kanuti Lake BBS

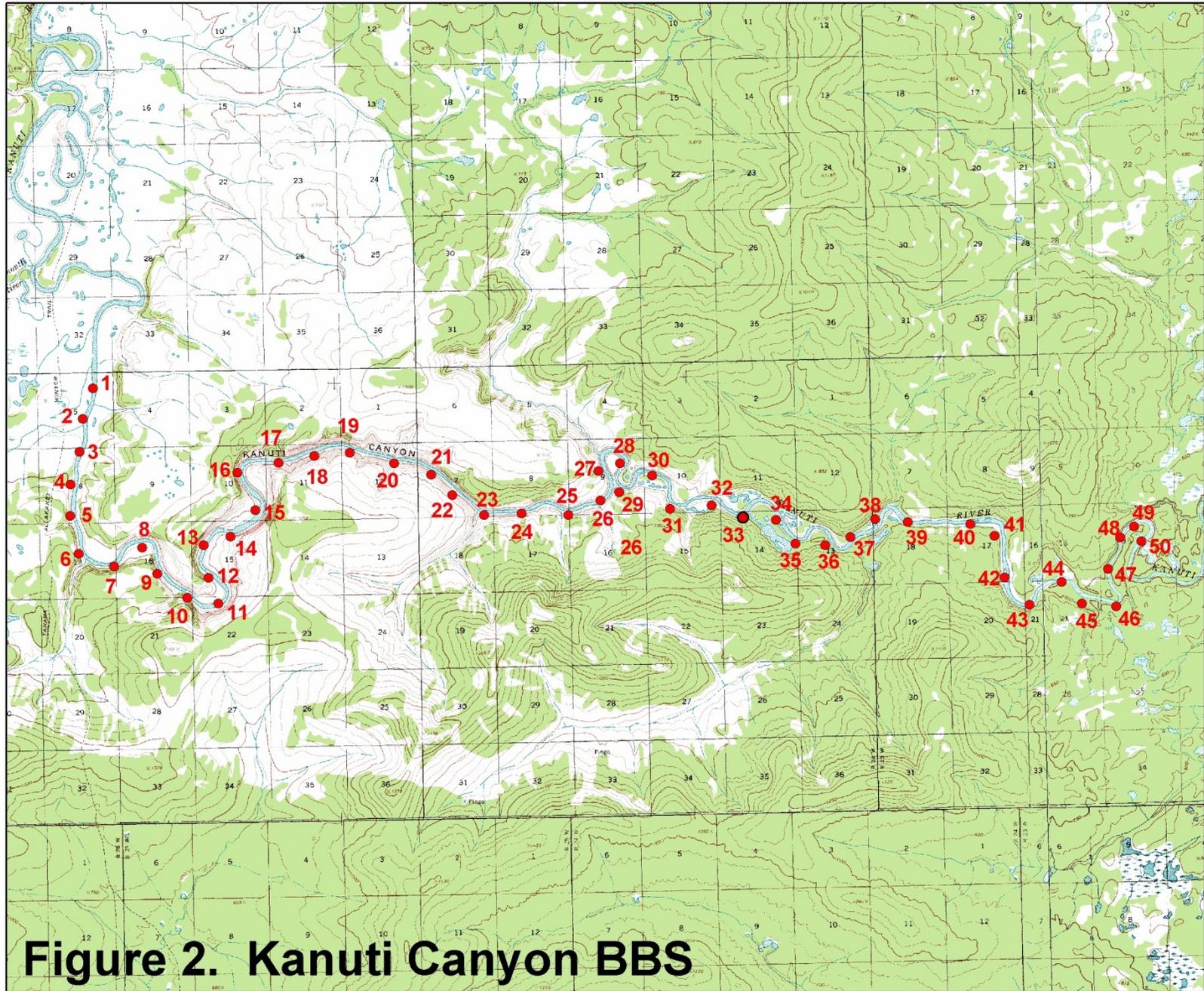


Figure 2. Kanuti Canyon BBS