



Tuesday Nature Adventures at City of Boulder Water Camp 2014 Report

Introduction:

For the summer of 2014 Boulder County Audubon Society partnered with the City of Boulder Parks and Recreation Department Water Camp at the Boulder Reservoir to present Tuesday Nature Adventure. This supplemental activity for water campers was created to add an environmental understanding to their exploration of the reservoir by kayak, canoe and sailboat and to add to the data base of species observed at the reservoir.

Methods:

Campers were introduced to the Nature Activity on Monday, the first day they attended the weeklong camp. Information was sent home to parents; when campers returned on Tuesday they signed up for the activity. In 2013 all campers were included in the Nature Adventure, in 2014 the number was limited to 21 to provide a more focused experience for participants. The Nature Adventures were on Tuesdays from 9:30 to 11:30 and were held every week from June 3 through August 12 except for the weeks of July 1 and July 29.

Water Camp provided at least 1 senior counselor for each ten campers and junior counselors as available. Boulder Audubon provided at least one adult for each camp with 3 trained youth naturalists. The water camp counselors received a salary from the camp and youth naturalists received a stipend from Boulder Audubon.

Campers transported themselves in kayaks or canoes to a predetermined area of the reservoir. Camp and Audubon staff accompanied this transport. Upon arrival at the site the Audubon Youth Naturalists made group introductions and encouraged each camper to share a nature fact with the group. Bioblitz, as a data collection method was explained and campers were divided into small groups with an Audubon youth leader and a water camp staff member. Each camper was equipped with a pair of binoculars or butterfly net and field guides provided by Boulder Audubon. Each group also selected a recorder for the group and was given a field log. Catch and release permits were obtained from Boulder Parks and Recreation Department for this activity. Campers were informed of the importance of the data collection to the ongoing research that takes place at the reservoir and were thanked for their participation.

Groups of campers dispersed into different areas and immediately began to scan the ground, trees and sky for any animal they could see. If they were able to identify the creature by memory or field guide, it was logged with common or scientific name or by general description if identification was not possible. Campers were given about 45 minutes for search and identification after which time the whole group was brought back together and field sheets were collected by Boulder Audubon adult leader. If there was time each small group got together, decided on a secret species and created hints that were then given to other campers. The goal of this exercise was to have each group think about traits and characteristics of a species and have the fun of trying to “stump” the other campers. Each camper then shared some new nature fact learned during their Nature Adventure. Campers then returned to the Marina accompanied by counselor and Boulder Audubon Youth Naturalists.

Results:

About 120 children participated in these nature camps. The age range was from 6 to 13. Each child’s parent(s) had been informed in advance about their child’s participation in this activity. Each child’s participation lasted for about 2 hours which included transportation to and from the activity site. There was a total of 240 hours of education provided and 75 hours of Boulder Audubon participation by 3 youth naturalists and 1 adult leader.

Same species seen each week include:

Birds - American White Pelican, Canada Goose, Mallard, Eurasian Collared-Dove, Black-capped Chickadee, American Robin, Red-winged Blackbird, Common Grackle. Butterflies - Cabbage White, Clouded Sulfur and Blue-eyed Darner. Bees and Bugs - European Honeybees, Yellow Jackets and Box Elder Bug

Species seen 2 or less times:

Birds - Turkey Vulture, Red-tailed Hawk, Broad-tailed Humming Bird, Belted Kingfisher, Vesper Sparrow, Downy Woodpecker, Say’s Phoebe, Eastern Kingbird, Blue Jay, House Wren, Common Yellow-throat, Common Raven, Western Meadow Lark, Vesper Sparrow, House Finch. Butterflies - Northern Crescent, Monarch, Painted Lady, Two-tailed Swallowtail, and Common Sooty Wing. Dragonflies - Black Saddlebags, American Ruby Spot, Twelve-spotted Skimmer, Plains Fork tail, American Jewel Wing, Variegated Meadowhawk and Lance-tipped Darner.

Species with evidence of presence of young:

Red-tailed Hawk (feeding young), American Robin and Common Grackle (on nest).

TABLE 1. Species at Dream Cove at Boulder Reservoir June3 through August 14, 2014

(* 06/03/2014 was done at small island near spillway. This site was not visited again due to high water making it difficult for campers to land.)

SPECIES	06/03*	06/10	06/17	06/24	07/07	07/15	07/22	08/05	08/14
BIRDS									
Western Grebe	x	x	x	x	x	x	x	x	
American White Pelican	x	x	x	x	x	x	x	x	x
Double-crested Cormorant				x	x		x	x	x
Great Blue Heron		x	x	x	x			x	

SPECIES	06/03*	06/10	06/17	06/24	07/07	07/15	07/22	08/05	08/14
Canada Goose	x	x	x	x	x	x	x	x	x
Gadwall		x	x	x	x	x		x	x
Mallard	x	x	x	x	x	x	x	x	x
Turkey Vulture			x				x		
Red-tailed Hawk									x (FY)
Osprey	x	x		x		x	x	x	x
American Kestrel		x				x	x		
American Coot		x		x		x	x	x	
Killdeer	x		x					x	
Spotted Sandpiper	x	x	x	x				x	
Ring-billed Gull		x	x	x	x		x	x	x
Mourning Dove	x	x	x	x	x			x	x
Eurasian Collared-Dove	x	x	x	x	x	x	x	x	x
Broad-tailed Hummingbird								x	
Belted Kingfisher		x						x	
Downy Woodpecker	x								
Say's Phoebe						x	x		
Western Kingbird	x	x	x	x	x	x	x		
Eastern Kingbird			x			x			
Blue Jay		x							
Cliff Swallow			x			x	x	x	x
Barn Swallow	x			x			x	x	x
House Wren	x								
Black-Capped Chickadee	x	x	x	x	x	x	x	x	x
American Robin	x	x (ON)	x	x	x	x	x	x (ON)	x (ON)
Yellow Warbler	x	x	x	x	x	x		x	x
Common Yellowthroat						x			
Vesper Sparrow	x								
Song Sparrow	x	x	x	x	x				
Common Raven	x		x						
Western Meadowlark				x					
Bullock's Oriole		x							
Yellow-headed Blackbird		x	x	x		x			
Red-winged Blackbird	x	x	x	x	x	x	x	x	x
Brewer's Blackbird			x	x	x	x		x	x
Common Grackle	x	x (ON)	x	x	x	x	x	x	x
American Goldfinch	x		x			x	x		
House Finch	x								
European Starling	x	x	x	x	x				x
MAMMALS						x		x	
Cottontail Rabbit sp.	x	x	x	x	x	x	x	x	
Mouse/Vole sp.						x			x

SPECIES	06/03	06/10	06/17	06/24	07/07	07/15	07/22	08/05	08/14
Mule Deer									X
American Raccoon (sign)	X	X	X	X	X			X	X
AMPHIBIANS AND FISH						X			
Woodhouse Toad			X	X	X	X	X	X	X
Bull Frog sp.	X	X	X	X					
Minnnow	X		X						
Tadpole	X	X	X	X					
Crayfish sp.	X								
SNAKES									
Garter Snake sp.				X	X	X		X	X
BUTTERFLIES									
Checkered White	X					X	X	X	X
Cabbage White	X	X	X	X	X	X	X	X	X
Clouded Sulfur	X	X	X	X	X	X	X	X	X
Orange Sulfur		X	X	X		X	X	X	
Northern Crescent									X
Monarch	X								X
Painted Lady						X			
Bluet sp.		X	X	X	X	X		X	X
Skipper sp.				X	X		X		
Western Tiger Swallowtail		X	X		X	X			
Two-tailed Swallowtail	X								
Common Sooty Wing			X						
Common Checkered Skipper						X			X
Fritillary sp.	X		X	X	X				
Woodland Skipper			X		X	X			
Corn Moth	X	X					X	X	
Tiger-moth sp.								X	
Yellow-pink Moth							X		X
Buffy and Black Moth							X		X
Apricot-colored Moth								X	X
DRAGONFLIES									
Blue-eyed Darner	X	X	X	X	X	X	X	X	X
Black Saddlebags							X		
Widow Skimmer			X	X	X		X		X
American Ruby Spot								X	X
Twelve-spotted Skimmer								X	X
Plains Fork tail								X	X
American Jewel Wing								X	
Variegated Meadowhawk							X	X	

Discussion:

The most frequent species seen at the reservoir during Nature Adventures were generalists that are found many places throughout Boulder County. It is interesting to note that many common species such as Red-tailed Hawk, Broad-tailed Hummingbird, Belted Kingfisher, Downy Woodpecker, Blue Jay, Eastern Kingbird, Common Yellow-throat, Western Meadowlark, Bullock's Oriole and House Finch were seen infrequently. I do not think that the dearth of these species is due to observer error as there were expert and experienced birders doing observation each week. The absence of these species may be explained by the high use of Dream Cove and the lack of tall trees for nesting and perching for at least some of the species. Some species are more secretive than others during breeding season and so will be more prevalent during early or late season observations.

The increased number of butterflies and dragon flies in the last 4 weeks of the Nature Adventure probably can probably be explained mostly by the skill of the adult leader in butterfly and dragonfly identification. Some of the increase is also due to there being more of these species in the area also. It is worth noting that several of these species have not been reported in this area of the reservoir before and the list should be compared to existing reports.

This report is submitted by Petrea Mah for the Boulder County Audubon Society on November 11, 2014

