

Wakarusa River, Clinton to Highway 59, Douglas Co., Kansas.

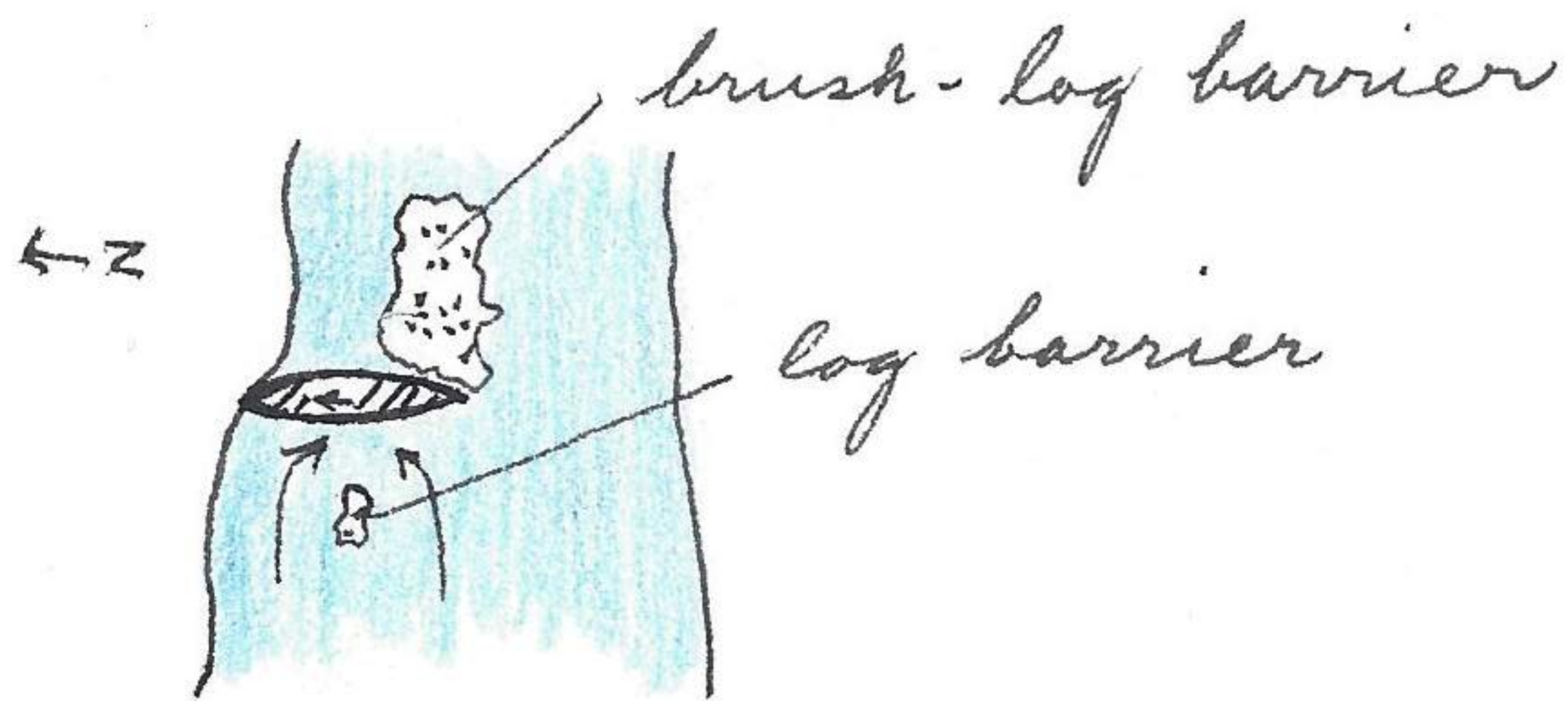
April 11, 1969

As river consultant for mariner Troop 660, camped with troop at N side of raised bridge bordering the river. Annette C in charge for the overnight camp and float down the Wakarusa the following day. Two groups of barred owls active during nite, one on island at camp and 1 near Rattlesnake Point to the N across valley.

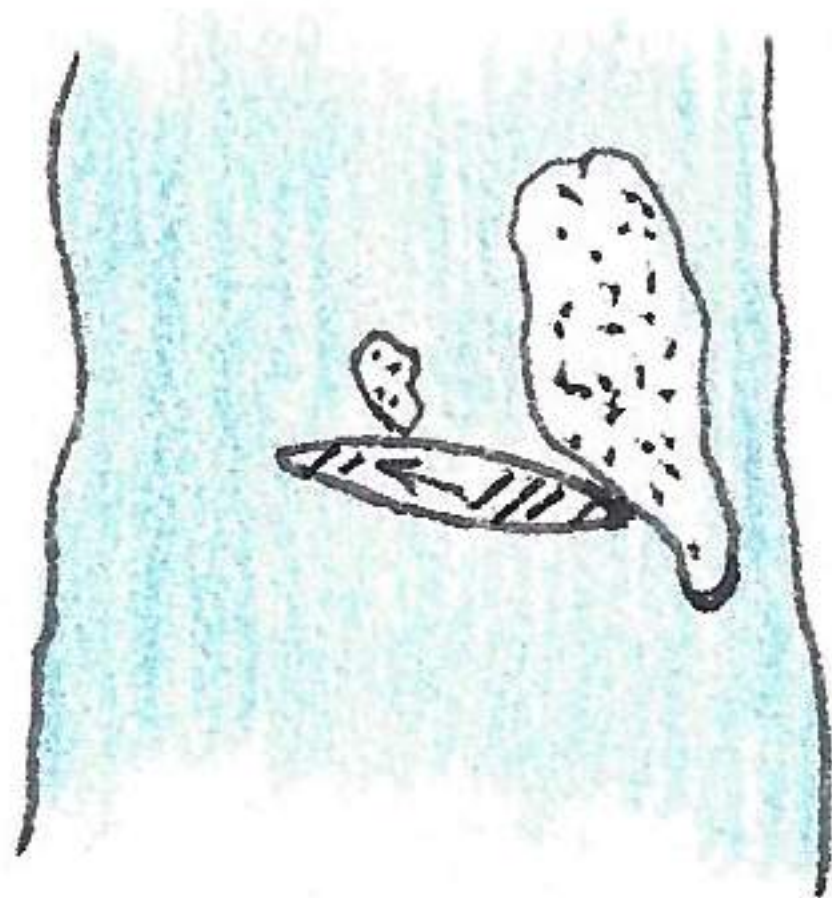
April 12, 1969

Departed Camp at 9:15 A.M. Six canoes and 16 mariners made trip from camp to highway 59. Stopped 12:00 for 1 hour for lunch. Arrived highway 59 at 2:00 P.M. Total mileage 12 miles +. Distances between bridges  $4\frac{1}{2}$  -  $2\frac{1}{2}$  -  $2\frac{1}{2}$  -  $2\frac{1}{2}$ . From camp, the river drops 10 feet in one mile. Water about  $2\frac{1}{2}$  feet higher than usual summer level, sufficiently high to erase most rapids and irregularities of the river. Observed 2 beaver and other evidence of beaver habitation. Also 1 pair wooducks. With six canoes had opportunity to observe several instances of irregular canoeing technique thus:

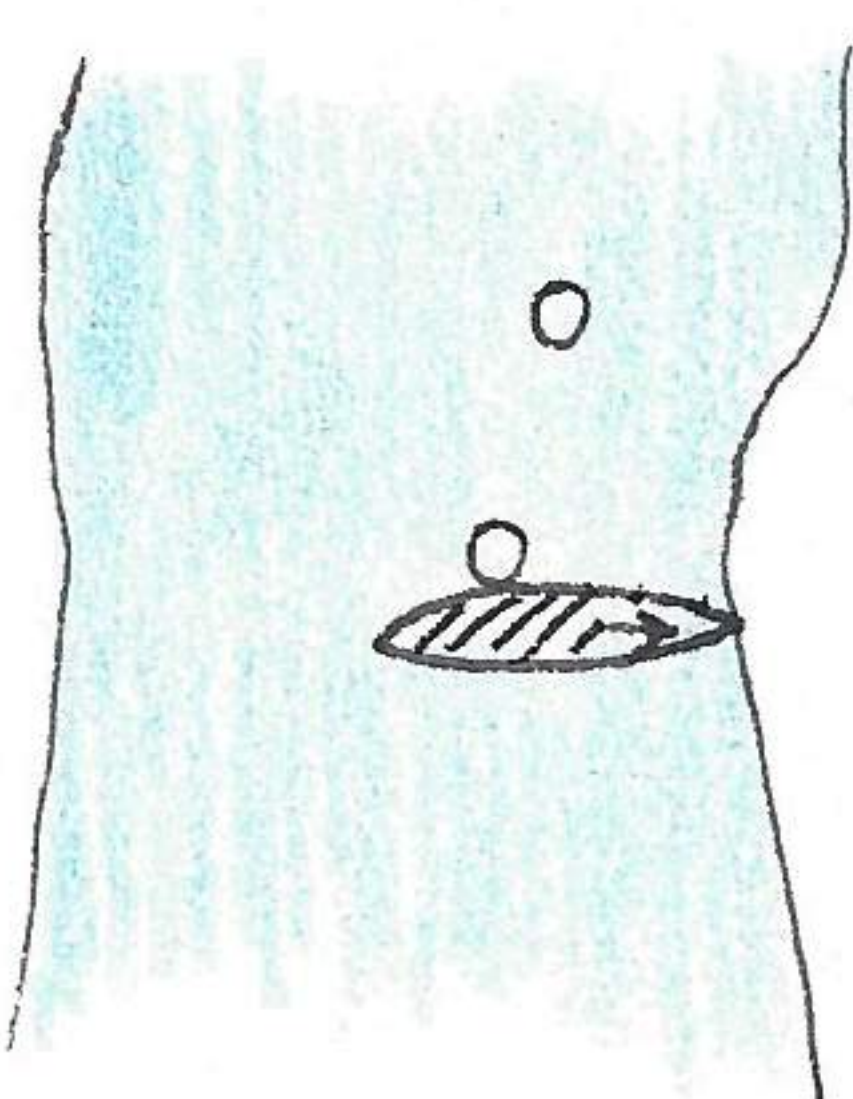
Analysis of near capsizes of canoes of Wakarusa trip.



In avoiding the small log barrier the canoe lodged between bank and brush-log barrier beyond. This required controlled maneuvering to get into small channel to N of brush-log barrier and the inexperienced were unable to control the canoe. Judgment was required before commitment to course.



Similar to above where lack of control to pass thru channel cause canoe to lodge against the two barriers. Water builds back of canoe and causes a near swamping.



Another case of lodging canoe sideways. If the canoe had been released at bow it would have lodged against the second barrier which had faster moving water and could have conceivably have swamped the canoe.



Water builds up on current side of canoe when canoe is crosswise against a barrier. Fast current is disastrous