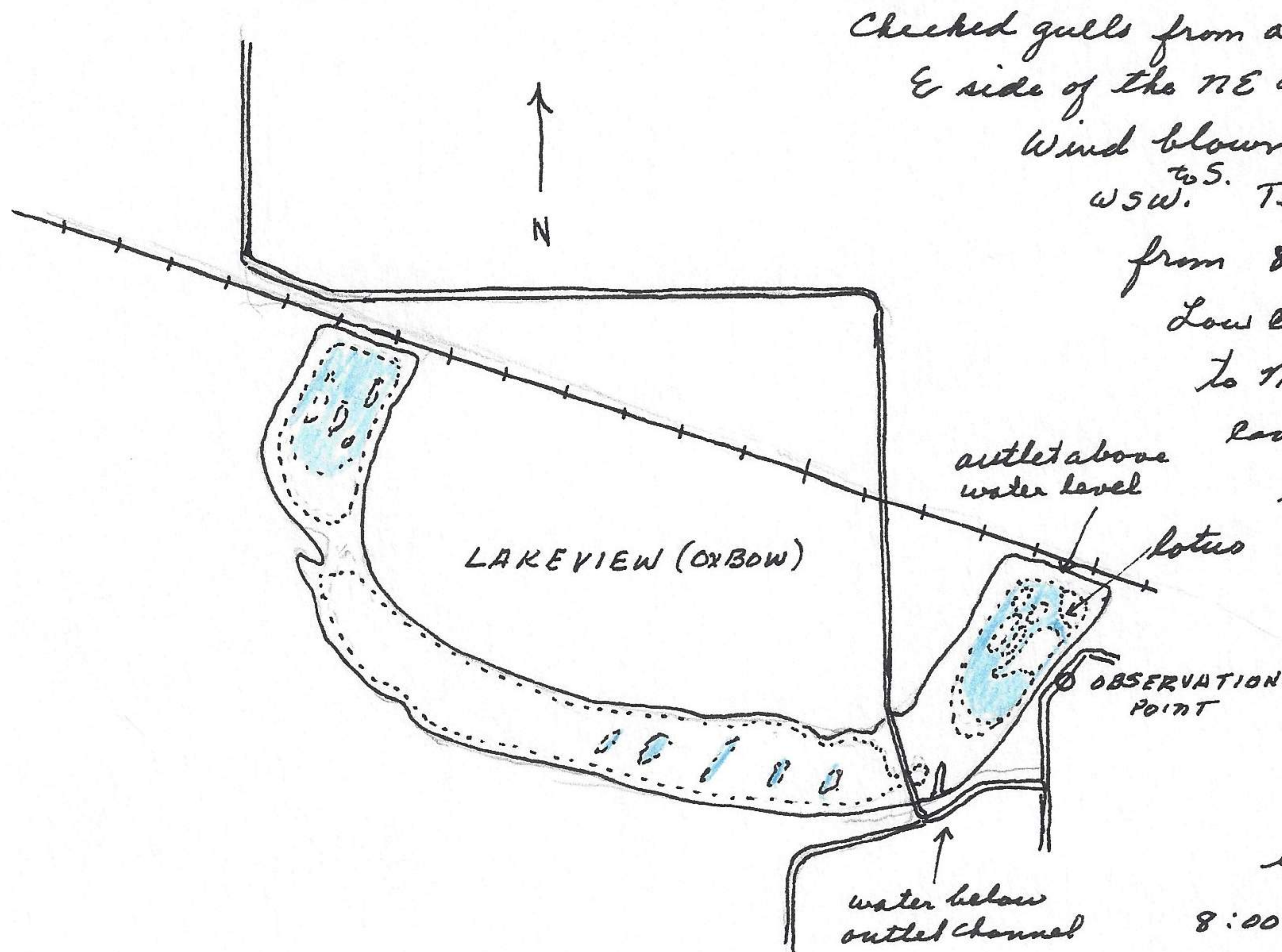


Lakeview, Douglas Co., Kansas
Nov. 29, 1975



Checked gulls from a vantage point on E side of the NE arm of the oxbow. Wind blowing 10-15 mph from WSW. (Yesterday at this time 14°F) Temp. 62°F, time from 8:00 A.M. to 10:00 A.M.

Low clouds moving rapidly to N. Yesterday snow covered all ground and lake, today snow gone from ground and ice on lake breaking up.

This breaking up of ice from 80% ice to 10% ice between 8:00 and 10:00 A.M. as a result of the disappear-

ing ice, the exposure of a 'fish-kill' of Dorosoma cepedianum or gizzard shad had attracted many gulls fluctuating in numbers from 250 to 500 to the area. The die-off was created by lowering of water and dissolved oxygen content of water and sudden freezing or cold temperatures. At one time the lake, at its present low level was completely sealed with ice and this event might have triggered the kill. The smallest fish was approx 3 1/2 inches and the largest 8 1/2 inches. The herring gulls were eating fish up to approx 8 inches while the ring-bill gull could only handle fish up to about 6 inches. All fish were the gizzard shad and all seem to be in a ridged state of rigor mortis; many taken thru the thin ice were slightly curved in outline. No live shad were taken by the gulls.

Except for 10 immature ^{herring} gulls, ranging from very and conspicuously dark birds with nearly all tail dark to lighter (second year?) birds the rest were ring-bill gulls and these mainly adult, however all had some darker markings on white head. Two ring-bills without white marks in primaries and these with segmented bands in tail band. L.D.

As the ice would break up and move with the wind, shad were exposed and gulls would then increase their feeding activity and at times 40% of the birds would be ~~to~~ have captured a fish and ~~was~~ working on ^{their} prey either in the water or on the ice. Their feeding tactics were to feed or fly into the wind above the open water for 100 or so