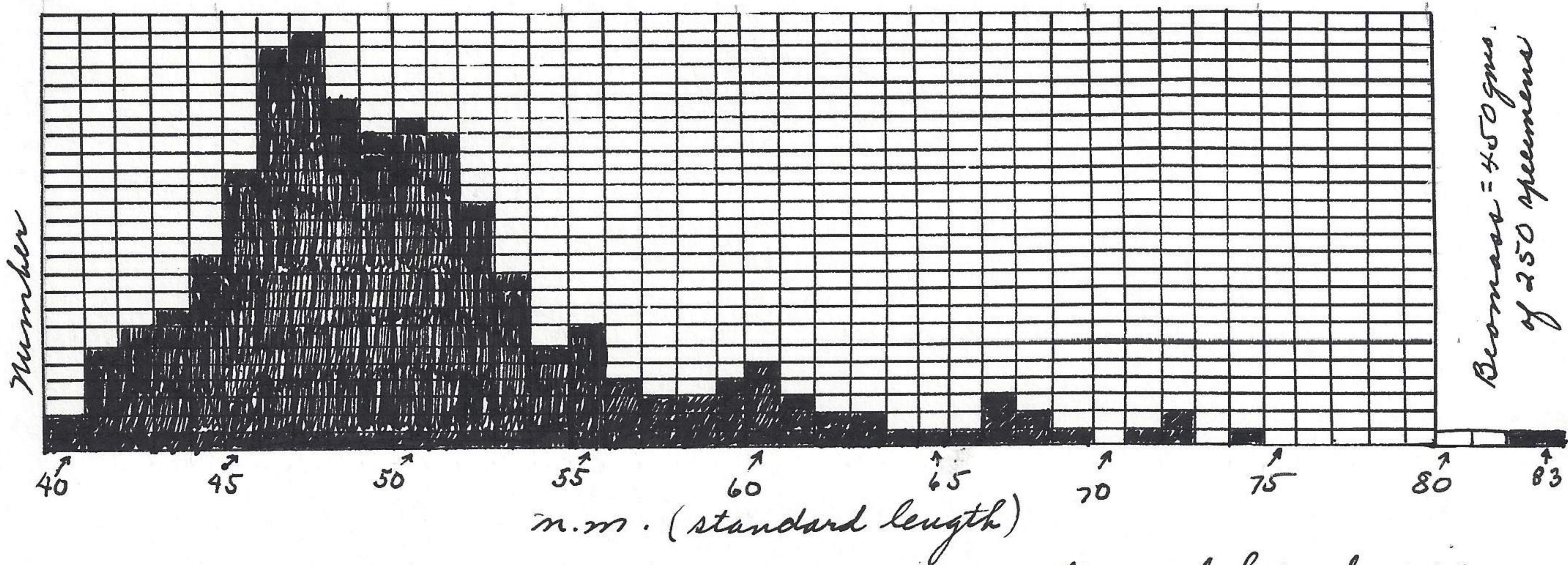


661204-251

aces of the stumps faced the river. Day with fine mist, about 36°F and practically no wind. Other observations are: Ice in protected places as thick as 2 inches. One killdeer in area. 26 Lapland Longspurs on sands of which there is a good exposure on W side of island. Numerous muskrat tracks and trails ^{and ran along slope of bank, deflecting of the numerous branches as if not used to these conditions}. A single Cottontail noted, but several tracks on sands. 5 sets of deer tracks in area below main bank and travelling consistently up river. Other birds noted along river are 18 cardinals in one group, 15 slate-colored juncos, 2 song sparrows, 8 goldfinches, 2 blue jays, 2 fox squirrels and although 4 hrs. in field did not see a duck. On return followed R.R. grade ^(beautiful native prairie and covered with cliffs) to the Eudora road, thence to bridge + lower road to Lawrence. measurements of the gizzard shad (Dorosoma cepedianum), representing all shad in 200 feet of river edge where the dead fish had lodged on shallow submerged sandbars or caught in slow back current pools:



These gizzard shad were examined for parasites and Saprolegnia but neither was found. Five fragments (not included in above) showed degeneration of flesh as if eaten by other fish or aquatic organisms. There was no evidence of Saprolegnia. There did appear to be general organ disintegration which could be caused by post-mortem changes. Associated with the shad were 19 NOTROPIS STRAMINEUS and 22 [?] young of some species. Photo 661204-1 of the gizzard shad examined above. Photo 661204-2 closeup of gizzard shad as representative example.