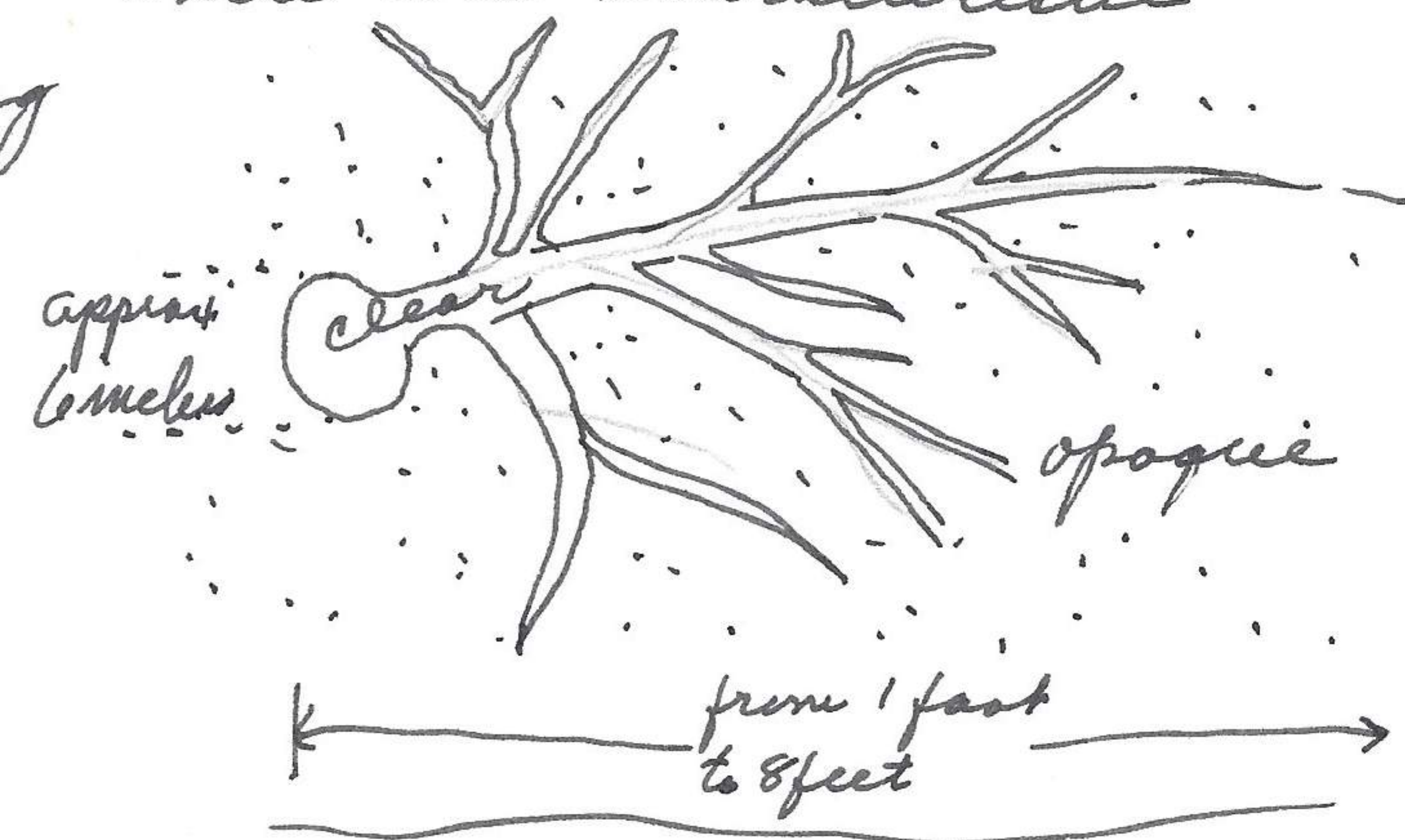


11:02 redtail hawk left trees along creek. 11:06 beaver tracks, winter wren preceding us down creek from one clump of debris exposed or root system to another. It called several times and kept always just above creek rather than flying up over bank. 1 red-bellied woodpecker called. 10:10 shrike on limb above creek. It allowed us to pass beneath 20 feet away. There are characteristic patterns of ice fractures all along creek, being more prevalent in some areas than elsewhere nor did they have any particular orientation. The fracture system was clear and the surrounding ice was opaque



some were at the base of old muskrat holes and radiated toward the center of the creek. The size of the crack decreased in size from the hole area outward. These patterns reminded me of neurological elements with cell bodies and dendrites. The orientation was predominantly at 90° to the axis of the creek. Main fracture parallel to side of creek and many were formed by our weight thru ice as deep as 2 feet. 11:18 middle of long stretch, 1 kinglet, 2 chickadees, beaver tracks on ice. There is less noticeable activity of beaver, especially piles of branches, cut trees etc. The tracks on snow are generally in middle of creek and regularly parallel to sides, although many side trips have been made to bank of creek. 2 chickadees, 1 crow fly by, 1 winter wren. Collected 631222-1 a winter wren. 11:33 south side of valley along hill, 2 redtails, 2 downy woodpeckers, 6 juncos (mainly slate colored), beaver tracks all along way 11:38 (barn & house to N. at NE corner of section 6). The farmer had placed a 50 gallon drum on ice and built a fire inside to melt ice for cattle to drink. It is surprising that although many cattle were in area, there was little evidence of tracks on the ice of the creek. As is true of areas around farms, there were more birds here than elsewhere. Included were 30 juncos, 4 chickadees, 8 cardinals, sparrow probably tree, 1 downy woodpecker. 11:50 2 chickadees, beaver hole. 11:52 1 downy woodpecker, 8 juncos, 2 cardinals, 2 red-bellied woodpeckers

