

gully. Undermined shagbarked hickory at brink of cliffs at  
 right of gully. marmot 200 feet S of gully at edge of bench.  
 A ram about 150' to holes in ledge which in turn are about  
 50' S of top of gully in ledges. now 1:03. A titmouse  
 was noted flying S along ledges to a point 200' where  
 it entered a hole in a tree. It traversed the area in  
 4 stops and when flying made more rapid beating of  
 the wings. This gulch will be known as marmot gulch.  
 Left 1:12. 1:16 second minor gulch. natural rock  
 promontory on N side of gulch. This gulch could be  
 called Arc gulch because of the broad arc it forms.  
 1:17 Point and now up along main E-W lateral drain-  
 age. 2 blue jays below. 1:18 pile of small rocks (1 to 4  
 inches in diameter and not associated with elevation.  
 1:24 head of drainage where <sup>old</sup> road leaves gulch and  
 joins top of hillside. Some trees, <sup>hackberry</sup> on road now 4-5  
 inches in diameter. now following road down gulch.  
 Crow calling E on uplands. Titmouse calling. The goose-  
 berry is common on N exposure and sparse or lacking on  
 S exposure of this drainage. One elm approx. 120 years  
 old. Other large trees had been cut. where road crosses  
 from S to N side of drainage. 1:30 <sup>2</sup> chickadees. Have not  
 heard frogs calling since at ear in marsh area. 1:32  
 now on main ~~to~~ road <sup>at old cement bridge</sup> and returning to ear. Titmouse  
 and bluebird singing. 1:36 Wabarus River at cascade.  
 Water flowing full width of cascade & brown in color. Can  
 hear 2 cardinals, 2 chickadees & 2 titmice. Fox squirrel  
 on W side river. Left river at 1:38 (area of former Camp site).  
 1:41 2 cardinals, 2 titmice. Some hickory leaves 3 inches  
 long. 1:45 Chickadee. 1:47 bluebird singing; 1 cardinal;  
 crow flew W. 1:48 2 titmice, cardinal, 1 chickadee. Red  
 bellied woodpecker. 1:53. Curve, now to E. 2 cardinals,  
 1 titmouse and few cricket frogs calling along Wabarus River.  
 1:59 male <sup>+2 ♀♀</sup> cardinals at pond. Downy woodpecker. Good hole  
 in high tree 80 N of road and could be used, by owls. meadow  
 larks in field N of Wabarus. <sup>2 ruby crowned kinglets, 1 field sparrow at Patton bridge.</sup> 2:10 leaving road and crossing  
 edge of field to S to side of valley. Titmice have given 4 different  
 calls today. Flickers calling 2:13 bend of field & now to E.  
 Area burned by fire shows holes from burnt out root septens.  
 These holes, when filled with water will add aquatic environments  
 to the forest area. 2:17 Cardinal and titmouse calling.