

ent. 10:16 400503-62 <sup>Raven.</sup> Orr's Ranch, a ranch with poplars  
and a large pond of water originating to the S.W near long  
Poplar tree. 10:20 Stopped to inspect rose nest in <sup>low</sup> Poplar  
tree at head of spring. Two nest in tree. nest of 3 eggs, 30'  
high. Raven was resting in tree on approach. It left and  
remained near circling above and calling. after leaving tree  
it returned. Started again at 10:45. After driving a few  
miles south from roven nest stopped to record <sup>(2-5-3-40)</sup> an interest-  
ing Bonneville shore line exposure which limits the growth



2-5-3-40

of jumpers. If  
we assume that  
the shore line  
represented here  
is of Bonneville  
age, one can

then postulate the probability of a time factor in the jumper  
distribution. Have observed on many trips the correlation  
between the Bonneville level and jumper distributions and  
in practically all cases these trees are confined above the  
level. Those trees below the levels can nearly always be  
accounted for by either tonguing along gulches, accidental,  
or invasion beyond their early confines via of moving sands.  
If such a hypothesis should hold true in a great majority of  
cases one could nearly be safe in saying that the jumper and  
sagebrush (which is associated with the jumpers in its greatest  
dominance) is the original climatic type of vegetation that  
persisted or followed shortly after the ice age and is even  
now occupying its former areas. This thought immediately  
impresses one with a new conception of the age of the old  
extinct Lake Bonneville. Personally I am imbued with the  
idea that the lack of penetration and invasion of jumpers into  
the new environment of this abandoned <sup>dry</sup> lake bottom is a  
matter of time and not soil conditions, as is so well indicated  
in the picture. Jumpers invade the old lake floor along  
the tracts of moving sands and when found associated with  
sands are generally larger due to lack of competition, new  
soil conditions or drainage. Have record of trees even below  
the Stansbury level but in every case they are associated  
with moving sands. Getting back to the picture of above,  
the Artemisia is found to be enjoying its greatest growth  
in the zone of jumpers directly above the Bonneville shore line.  
The Artemisia passes beyond the shore line but is soon replaced