

Senator HANSEN. Thank you, Mr. Chairman.

In your testimony, Mr. Gottschalk, you referred to some of the activities which, as you described them, would not adversely affect the wilderness land surface. Those being seasonal aerial counts of wildlife, patrols for the purpose of preventing legal trespass, grazing where used as a refuge management tool—you are speaking of grazing by domestic livestock?

Mr. GOTTSCHALK. That is correct.

Senator HANSEN. I think you also mentioned in that particular statement inclusion of minimum and compatible facilities for public safety and sanitation and control of pest plants. I assume these uses, in the judgment of your Solicitor, do not do violence to the wilderness concept; is that correct?

Mr. GOTTSCHALK. That is correct.

For the record, Senator Jordan, I believe, asked a question as to why we had not included all of the Great Swamp in the wilderness proposal and I will respond to that at this time.

As indicated by one of the earlier witnesses, there is a diversity of habitat types as you run from the east and north end of the Great Swamp area, which would be to the right as we look at the map, over to the Passaic River, which forms a part of the westerly boundary of the refuge.

Senator HANSEN. May I ask if someone familiar with the area might take a pointer and indicate what you are referring to? It would be helpful to me.

Mr. GOTTSCHALK. The Hartley Dodge unit lies on the easterly part of the refuge, the total refuge goes all the way to the Passaic River down in this area. The swamp area is a deciduous swamp type, consisting of woodland interspersed with shallow pools in the forest, and rocky outcroppings along with gravelly humps or small, low hills and is characterized by being a rather densely closed botanical area, that is to say, the crowns of the trees exclude most of the light and you find very little of the marsh type of swamp in this upper area.

Because of the shallowness of the soil and the large amount of rock, et cetera, it has never been utilized extensively in the past for agriculture. Even back in colonial days it was left in a wild condition.

As we move in this direction, we gradually move into an intergrade in which the trees begin to thin out and there are more openings, openings of a marsh type in which marsh grasses and cattails predominate. At times in the past much of this area has been farmed. Frequently it was just pasture because it was so low and subject to frequent flooding so agriculture could not be practiced.

Coming down further the soil was deeper and down here there was some cultivation with considerable amounts of pasture in this area.

So you see from this area where you find a fairly natural situation, you move to an area where it is submarginal land from the standpoint of agriculture, but it is not wild land. As we developed our concept for the management of this whole area, we established the M. Hartley Dodge natural area back in 1963 before the Wilderness Act became a reality.

In this area (Harding unit) and in the lower portion we recognize the possibility for developing wildlife habitats, principally shallow pools where we would expect to see nesting, resting, and feeding habi-