

support much bird life in contrast and may represent true climax. Fracture ridges and ponds adjacent lakes, if lakes were more or less permanent, were second best in supporting bird numbers, particularly red-backed and pectoral sandpeeps. Areas undergoing complete inundation with drainage to rivers were the least populated by birds. It is characterized by dried stems in mat formation which have accumulated at shoreline and also the presence of greenish-yellow grasses and sedges instead of the drab lichens and masses of the climax. Rivers are successional or edaphic and suffer considerable overflow. Willows (some 3 and 4 feet high) are generally associated with these rivers and shifting sand dunes. Few birds are along rivers, at least at this time of year. A good many shorebirds are on slopes in vicinity of larger lakes. In successional areas of periodic inundation, one walks for miles without seeing many birds. Photo 510709-1 of white flowers and sky picture of last 12 hours. Black-bellied plover call like long-billed curlew except more plaintive. The red-backed sandpiper calls like a western grebe, the semipalmated is characterized by vibrating wings and flycatcherlike call. Jones shot a male black-bellied plover and the ♀ returned to dead bird in face of Jones' approach to the dead bird. Ordinarily they keep out of shotgun range. Jones caught 1 small ptarmigan near the one I caught several days ago which might indicate they do not move about to any extent. Snow buntings and Alaskan longspur (young) are capable of flight. Examined small colony of gulls and terns. The Sabine gulls and Arctic tern are compatible with nests 20 feet from each other and young circulating through each others territory. Parent birds approach at 150 feet and then return and hover or fly directly over nests. One Sabine gull nest on mound about size of gallon jug with water on all sides. Tern nest on islands about 1 sq. yard and continual use makes a greenlike lawn of vegetation. This condition of lawnlike grass also occurs where geese and ducks use drainage channel from one lake to another, an effect of trampling and fertilization with fecal matter. 22 glaucous gulls in area. Noted 13 Arctic tern in grass in standing water of lake as if nesting. Two pairs of Canadian geese in area. One eider nest of 5 eggs in climax tundra (hummocky type). Semipalmated sandpiper with newly hatched young. Arctic loon ♂ still incubating egg of last few days of observation.