In the 1930's the Department of Lands and Forests was purchasing burnt and cutover land, with the intent that the land would eventually provide timber. In 1936 some 20,000 acres of burnt land in Cumberland County were purchased. This land became the nucleus of the Chignecto Game Sanctuary in 1937. It became the site of an important forest nursery and reforestation research site.

It was hoped that the creation of the sanctuary would help preserve the native moose population, which would hopefully increase their numbers in the sanctuary and then move out to surrounding areas. This was not as successful as hoped but the area is still important habitat for a remnant population of native Nova Scotia moose.

The sanctuary was enlarged over the years and total area is now 22,082 hectares, of which 500 hectares are privately owned, with the remainder owned by the Province. The sanctuary is made up of 19,778 hectares of woodland, with 1864 hectares of water and wetlands, 125 hectares of barrens, and 316 hectares of roads, utility corridors and other miscellaneous land classifications.

Hunting and trapping were originally prohibited. However, rifle hunting was allowed in 1961 and 1966 because of an overpopulation of deer. Since 1969 bowhunting has been allowed in the sanctuary during the general open season for hunting deer and the special open season for bowhunting deer.