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Projections of the greenhouses required per million peyotes; with an intended annual harvesting rotation cycle capable of permitting 1 million peyotes to be harvested.

This ball-parking is for 100 foot x 100 foot greenhouses producing 1 million peyotes per year once they reach an operational age after 12-16 years.

Numbers are for a 12 or 16 year planting & harvest cycle.

Obviously 1 million is not enough now so this number will not be enough in the future but this estimation will at least be able to give a sense of the music and provide people with a tool for successfully making those plans. This needs far fewer greenhouses than are in the Netherlands.

# of Greenhouses needed for an annual harvest of 1 million peyotes— Based on a 100 ft x 100 ft greenhouse with 4 ft wide benches				
Benches/Aisles	48”/18” widths		48”/24” widths	
Useable sq. ft.	8400		6800	
Pot size or spacing	3”	4”	3”	4”
Plants per greenhouse	134,400	75,600	108,800	61,200
# of greenhouses needed to hold 1 million peyotes	7.4	13.23	9.2	16.34
Total # required for 12 yr rotation	88.8	158.76	110.4	196.08
Total # required for 16 yr rotation	118.4	211.68	147.2	261.44
Total # required for 8 yr reharvest rotation	59.2	105.84	73.6	130.72

To experience annual harvests of a slow growing perennial, the desired number for harvesting needs to be replanted every year and this repeated for as many years as is required for this to become sustainably harvested on an annual basis.

The re-harvest cycle appears to be 8 years or so (after the first 12-16 years have elapsed) but whether the reality is 8, 9 or 10 years will require future empirical evidence. (Our regrowth study intended to provide information enabling sustainable harvesting was poached after 8 years so we could not establish an accurate number, only that it was a number at least equal to or greater than 8 years.)

To apply this to reality:

Multiply numbers above by the numbers of millions that will be needed per year.

Multiply also by the difference in square feet if smaller greenhouses are used. ie for 50’x100’ multiply the totals by two. For 25’x50’ multiply by four.

Add 20% for potential losses as it is better to risk abundance than a shortfall.