LEVEL OF MONITORING	PARAMETERS	EXPLANATION	OBJECTIVES
Physical environment	• Temperature, precipitation, solar radiation, wind, cloud cover, atmospheric pressure, humidity • Soil moisture, texture, pH, nutrients, salinity, redox potential, cation exchange capacity	Environmental conditions of the habitat where the plant occurs	To identify changes in the physical conditions that characterize target CWR populations
Biotic interactions	• Density, dominance, frequency, cover and importance value of all taxa that occur in the community • Density and frequency of pollinators, seed dispersers, predators and parasites • Identification of pathogens and intensity of pathogen infection	• Density: Number of individuals/area sampled • Dominance: Total basal area or aerial coverage values/area sampled • Frequency: Number of plots in which a species occurs/total number of plots sampled • Importance value: Relative density + relative dominance + relative frequency	To identify relevant changes in the communities that occur in the habitat of the target CWR populations, including changes in ownership, occupation and land use.
Natural and anthropogenic disturbance	• Natural (fire, flooding, slope movement, wind damage, extreme temperatures, trampling, erosion) • Human-induced disturbance (mining, logging, livestock grazing, recreation, road construction or maintenance, weed control)	Threats to the populations of the target species. See the IUCN's Threats Classification Scheme in Appendix 1	• To identify changes in the physical conditions that characterize CWR and their associated communities. • To account for human influence on the status of CWR populations
Demographic	Population size	Total number of individuals in a population	• To assess viability of populations using: • Population trends • Extinction risk • Population viability analysis (PVA) • To identify demographic factors that are most relevant to population viability
	Population density	Number of individuals per unit area	
	Population frequency	% of plots occupied by the target species within the sampled area	
	Population cover	% of plot area that falls within the vertical projection of the plants of the target species	
	Population structure	Size, stage or age of individuals	
	Survival rate	Proportion of individuals recorded in a first census that are still alive at the second census (usually for each class in structured populations)	
	Growth rate	Probability that a surviving individual moves from one size (or stage) class to any of the others	

LEVEL OF MONITORING	PARAMETERS	EXPLANATION	OBJECTIVES
	Fertility rate	Average number of offspring that individuals in each class produce from one census to the next	
	Spatial structure	Spatial distribution of each individual	
Genetic	Effective population size (*Ne*)	The size of a hypothetical population that would lose genetic diversity at the same rate as the population under study	• To evaluate the genetic diversity within populations and trends/changes therein over time • To understand the dynamics of populations • To recognize the causes behind the reduction of fitness of a population • To determine the level of inbreeding of the target population • To determine what to do if a protected population has suffered a severe decline in population size
	Genetic diversity, inbreeding, gene flow and population structure (*F* statistics)	Both genetic 'richness' (the total number of genotypes or alleles regardless of frequency) and 'evenness' (the frequencies of different alleles or genotypes) can be measures of genetic diversity; Nei's expected heterozygosity is also a measure of genetic diversity. Inbreeding is determined through F_{IS}, and gene flow and population structure through F_{ST}, and clustering analysis.	
	Minimum viable population	The minimum size of a population needed to maintain genetic variation, avoid inbreeding depression and retain evolutionary potential	