Two research approaches were combined to study the perceptions, understandings and expectations of visitors, managers and local communities sharing the desert landscape within the recently created Pinacate Biosphere Reserve, Sonora Mexico. The psychophysical approach was applied to measure visitor's perceptions of scenic beauty and quality of outdoor experience in the Reserve. Students at the University of Arizona and tourists at Organ Pipe Cactus National Monument rated views from the road and major attractions presented as color slides arranged in a "virtual trip." Results indicated high internal reliability and consensus in ratings between groups. The highest ratings of scenic beauty were associated with lush vegetation, columnar cacti, rugged geological formations and volcanic features. Travel direction and order of "visitation" for the four major attraction sites were important variables affecting scenic beauty ratings (for road views) and enjoyment of the trip (for attractions), respectively.

Questionnaires, structured and open interviews, and review of public meeting documents were used to assess and contrast the three different population's understandings and expectations regarding the shared desert landscape. The major themes that emerged focused on the trade-offs between environmental conservation goals and development needs of the communities living, or having vested interests in the Pinacate Reserve. Local community (Ejidos) members favored greater emphasis on utilization of natural resources for economic development. Biosphere managers held strongly to their environmental protection mandates, but struggled to find a balance between conservation goals and community needs. Eco-tourism was viewed by both populations as the most attractive option for achieving such a balance. Visitors agreed that tourism activities should contribute to the welfare of local residents, but in a direct trade-off they much more strongly favored management policies that protect the natural desert environment.