*Issue 9:* Tamarisk is not an invader species, but a successional stage, becoming established on recently-scoured areas; livestock do eat tamarisk for its salt content; the Service needs to clarify the positive and negative characteristics of tamarisk; tamarisk increases habitat availability, in fact provides high-quality bird habitat.

Service Response: The Service found no information, and was not provided any information by commenters, indicating that tamarisk is primarily a successional stage vegetation type, rather than an invasive exotic. This final rule presents an updated discussion of tamarisk ecology, supported by additional literature references. The Service concurs with the consensus among published authorities that tamarisk is an invasive, usually dominant exotic plant, not a successional species. Commenters that stated livestock eat tamarisk for its salt content provided no supporting information. The Service's understanding of the literature is that cattle prefer native species over tamarisk for forage.

As discussed in this rule, *E. t. extimus* has been documented nesting in tamarisk at elevations above approximately 625 m (2000 feet). Rather than attempt to present criteria here for when tamarisk eradication presents a threat or a positive recovery action, the Service will address this issue on a case-by-case basis through the section 7 consultation process with other Federal agencies. This will allow Federal agencies the flexibility to consider individual cases in the light of the specific circumstances surrounding each one.

Although Brown and Trosset (1989) suggested that tamarisk provided an 'ecological equivalent'' to native vegetation, they qualified this statement. They noted that their study involved small sample sizes, and that their methods differed from Whitmore's (1975, 1977), which was their basis for comparison with native riparian habitats. Further, Brown and Trosset (1989) noted that this "ecological equivalent" function may be most significant where tamarisk became established where no native riparian vegetation existed previously (e.g., the Colorado River in Grand Canyon).

*Issue 10:* Herbert Brown's collection of 36 nests with eggs from the lower Colorado River, in 1900 and 1902, indicates overcollection for science may have caused declines.

*Service Response:* The effects of Brown's collections on populations over 90 years ago are unknown. These effects may have been significant. However,

Brown's collections themselves may suggest that populations at that time could sustain such collecting pressure. The origin of Brown's collections from several specific locales suggests that E. t. extimus was an abundant nesting bird in the area of the confluence of the Gila and Colorado rivers. Collection of 36 nests would have impacted reproduction alone, only for 1902, when all but one of the nests was collected. Considering continued habitat loss, and increasing cowbird populations since 1902, the Service does not believe that Brown's collection of 36 nests with eggs in 1900 and 1902 significantly affects E. t. extimus populations in 1995. However, the Service believes that current flycatcher populations are unlikely to be able to sustain collecting pressures like Brown's activities of 1902. In 1993, extensive surveys of the region of Brown's collections located only four to five territories (Muiznieks et al. 1994).

*Issue 11:* Drought has impacted habitat.

Service Response: The Service recognizes that extended droughts are likely to have impacted *E. t. extimus* through habitat reduction. This natural phenomenon and human-induced habitat impacts may exacerbate one another's effects on *E. t. extimus* habitat.

*Issue 12:* Predators such as snakes, hawks, ravens, grackles, and domestic cats are threats to *E. t. extimus*.

Service Response: The Service agrees that these constitute potential predators of songbirds, including E. t. extimus. While predation would not normally be expected to be a major threat to the flycatcher, its populations may be so low currently that they cannot withstand normal predation. Further, several of these types of predation may be facilitated by habitat alteration or other human actions. Therefore, the Service will address predation in recovery planning, and other Federal agencies should consider the effects of their actions on some of these forms of predation.

*Issue 13:* Hikers, elk, deer, and beaver are threats to flycatcher nests and habitat; listing would cause restrictions on fishing and water recreation.

Service Response: No information was provided to support statements that hikers constitute a threat to *E. t. extimus.* This rule briefly discusses possible impacts of recreation on *E. t. extimus* and its habitat. These impacts are expected to be primarily effects on vegetation through soil compaction, clearing vegetation, and creating trails. Because *E. t. extimus* is not a timid species, disturbance is expected to be an impact only when continuous intrusive activities take place near habitat, or when recreation takes place within or adjacent to the nest stand. Because nest stands tend to be very dense, virtually impenetrable thickets, often with swampy conditions, recreational impacts are not expected to occur often.

Elk and deer use riparian habitats for foraging, but generally behave differently than domestic livestock. They tend not to occur in large concentrations and remain in riparian areas for long periods like domestic cattle. The Service is aware that elk can impact riparian systems when their numbers reach high levels. However, elk are lacking from the majority of southwestern willow flycatcher habitats, because these riparian areas occur at lower elevations than elk. Beaver cut and use willow and cottonwood, but may also be important in creating quietwater riparian habitats by damming smaller and steeper creeks.

*Issue 14:* The presence of unoccupied habitat indicates that *E. t. extimus* is not currently habitat limited.

Service Response: As discussed in this rule, the Service has determined that E. t. extimus has suffered extensive habitat loss, which is complicated by the current low number of flycatchers, and reduction of reproductive output due to brood parasitism by brownheaded cowbirds. The current existence of apparently suitable habitat that is not occupied by E. t. extimus more likely indicates that its numbers are too low to fill all available habitat. Further, habitat exists in isolated, fragmented patches. With low population numbers and inhibited reproduction, E. t. extimus may be unable to maintain local populations, much less be able to disperse and colonize unoccupied locales.

*Issue 15:* Cowbird parasitism is the main threat to *E. t. extimus*, not habitat loss; cowbird control is the primary recovery need, not habitat protection; cowbird trapping would eliminate the need for designating critical habitat; the Service should implement and fund cowbird control programs instead of listing.

Service Response: The Service has determined that cowbird parasitism is one of several primary threats to *E. t. extimus*, which also includes the loss and modification of habitat. Cowbird parasitism and loss and modification of habitat are interrelated. Cowbird parasitism is a function not just of cowbird abundance, but also habitat quality. Potential host species in degraded, fragmented habitat are more susceptible to nest parasitism than those nesting in larger tracts of dense, contiguous habitat. Cowbird parasitism