Tamarisk beetle distribution across the landscape did not change much in 2017, though population sizes in some areas were significantly larger than in recent years.

The beetle crossed into the Gila watershed in southern Arizona for the first time, on the Hassayampa, in Wickenburg. However, this was an early season detection and no beetles were found in that area, or farther south, on subsequent monitoring trips later in the season. This could be due to environmental factors affecting this particular species, the Northern Tamarisk Beetle (*Diorhabda carinulata*), but more research needs to be done to determine the causes of this distribution pattern.

The beetle did not make it into the Gila watershed from the east, as was expected, but did move closer to the upper reaches of the watershed near Silver City, NM. Population numbers remained low across eastern Colorado, Oklahoma, and northern Texas, and for yet another year no beetles were found in Kansas.

However, populations rebounded tremendously across southern Utah with large numbers of beetles observed along the Colorado and Green Rivers in Grand County and along the San Rafael, Dirty Devil, and Fremont rivers west of there. This trend appears to support the theory that tamarisk-beetle population interactions will ebb and flow in the typical predator-prey relationship as the beetle becomes a long-term inhabitant of North American river systems.

Monitoring is proving to be more and more important as the beetle has not been present in the system for long and the dynamics of population movement and stability are not yet understood.

To become involved in helping to track the tamarisk beetle and to aid in data collection for the largest ongoing ecological experiment in North America, please visit our website or contact Ben Bloodworth directly at <u>bbloodworth@RiversEdgeWest.org</u>.

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