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Several experiments have shown that herbivores affect plant resistance, growth, and survival. In the current study, we focused on milkweed due to the interest in this species in monarch conservation efforts. Plants were selected across three sites that differed in plant water availability. We randomly chose one leaf per plant and collected and pressed the leaf. The position of the leaf collected was recorded based on the leaves remaining on the main stem. Collections occurred towards the end of the season so that herbivore damage would have accumulated from young plant, through flowering, and fruit dehiscence. Collected leaves were scanned and leaf tissue removed estimated by measuring missing leaf tissue, using a digital application, Image J. We tested, using linear regression, the hypothesis that the older leaves, more basal, would have greater damage compared to younger leaves, higher up on the stem. We also took a look at fruit production and were interested to see if that had any effect of herbivory. This project is still in progress, we are currently focusing on species identification to gain a better understanding of herbivore damage.