The Effects of Monk Parakeet Age on Sociality

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Monk parakeets are multi-decade inhabitants of Brooklyn that contribute to noise pollution; they make loud social calls in their communal nests atop trees, telephone poles, and utility structures. Understanding their social behavior is important for the quality of life of urban residents living in proximity to monk parakeets. It was hypothesized that young and old parakeets would differ in their agonistic displays. 339 monk parakeet social interactions were observed around Brooklyn between January 2, 2017 and March 24th, 2017 for phase 1 of the project and their ages and frequency of six agonistic behaviors (biting, feather-pulling, perch-displacement, chasing, vocalization and aggressive vocalization) were recorded. Analysis of our aggression data did not support the hypothesis. However, further analysis showed that vocalization varied significantly with age, ?2(1)=10.36,p<0.01. Old monk parakeets vocalized two times more than young. Also, all the parakeets in the sample vocalized significantly more in the spring than in the fall or winter (H(2)=9.94,p<0.01. Therefore, a second study designed to address these relationships directly was conducted. The same variables were observed, but on videos of monk parakeets from April 23th, 2017 to August 28th, 2017. Analysis of the data showed that there was no significant difference in aggression between young and old birds, ?2(1)=0,p<0.01. However, age of parakeets varied with group size; old monk parakeets were more likely to be alone, while young were more likely to be in a group, ?2(1)=5.397,p <0.01. Overall, these two studies allow us to conclude that monk parakeets are relatively non aggressive animals, and noise control efforts are best based on old monk parakeets in the spring.

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