Fruit-bird interactions in the Marianas

Evan Fricke, Haldre Rogers, John Bender, Henry Pollock, Evan Rehm, Julie Savidge
An important mutualistic interaction
1. Increased germination through seed handling
2. Escape from high mortality near parent plant
3. Move to microsites suitable for germination
4. Allow plants to colonize new areas
1. Who are the important bird seed dispersers?

2. What are the differences between seed dispersers?

3. What are the differences among plant species?
How do we learn about the ecological roles of fruit-eating birds in the Marianas?
1. Who are the important bird seed dispersers?

2. What are the differences between seed dispersers?

3. What are the differences among plant species?
Fruit-eating birds in the Marianas
A look back at historical bird loss

The Prehistory of Vertebrates, Especially Birds, on Tinian, Aguiguan, and Rota, Northern Mariana Islands

David W. Steadman

Micronesica 31(2):319-345. 1999
1. Who are the important bird seed dispersers?

2. What are the differences between seed dispersers?

3. What are the differences among plant species?
1. Who are the important bird seed dispersers?

2. What are the differences between seed dispersers?

3. What are the differences among plant species?
How many plant species can they eat?

How abundant are they?
How far do they disperse seeds?

Do they move across habitat types?

How does gut passage affect germination?
1. Who are the important bird seed dispersers?

2. What are the differences between seed dispersers?

3. What are the differences among plant species?
1. Increased germination through seed handling
2. Escape from high mortality near parent plant
3. Move to microsites suitable for germination
4. Allow plants to colonize new areas
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Amahadyan / Pipturus argenteus
Mapunyao / Aglaia mariannensis
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Conclusions

• Bird-plant interactions are important in Mariana terrestrial ecosystems

• Observations & experiments can show the plants most important for birds and birds most important to plants
Thanks!