

Station 2, Fruit/Seed Dispersal Answer Key

Overall guide:

Wind: Seed should be dry & lightweight, with adaptations to catching the wind such as wings or fluff.

Animal (via ingestion): Seeds often have nutritious fleshy fruit surrounding them; the seed does not get digested and is dispersed in feces or discarded. In the case of oaks, the trees bet that squirrels won't eat all of the nuts they've cached.

Animal (via carrying): Surface of seed or fruit is covered in small spines, hooks, or hair to stick to the coats of passing animals.

Water: Fruits are able to float, and have a lot of storage tissue for long water journeys.

Life Sciences Outreach Faculty Speaker Series for High School Biology Teachers
How Biologists View Structure and Function
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Station 2, Species Key:

Wind:

Acer rubrum
Asclepias syriaca
Taraxacum ceratophorum
Platanus x acerifolia
Ptelea trifoliata
Catalpa ovata
Pterocarya x rehderiana

Animal (via ingestion):

Quercus spp (oak)
Maclura pomifera
Callicarpa dichotoma
Symplocos paniculata
Chaenomeles japonica (Japanese quince)

Animal (via carrying):

Arctium lappa
Proboscidea spp
Bidens spp

Water:

Trapa natans
Cocos nucifera (coconut)

Bonus: megafaunal dispersal syndrome

The *Proboscidea* (devil's claws) and *Maclura pomifera* (Osage orange)! The animals that *Proboscidea* could have hitched a ride on must have been enormous! Same with the animals that thought of *Maclura* as a nice snack! Read more about the fascinating story of the Osage Orange here (In Defense of Plants is in general a fantastic resource for all things plant!):

<http://www.indefenseofplants.com/blog/2015/10/25/osage-orange?rq=megafauna>