Milkweed Seed Collection Protocol

Timing:

The ideal time to collect milkweed seed is when the pods have matured and begun to dry out. Typically, milkweed plants produce seed pods that ripen in late summer or early fall, usually between August and October, depending on the local climate conditions. The timing of seed collection should be based on observations of the seed pod's color, size, and texture. The seed pod should be a uniform brown color, feel dry and papery to the touch, and begin to split open, revealing the seeds inside.

- Common milkweed (Asclepias syriaca): Seed pods mature in late summer and early fall, usually between August and September. Collect seed pods when they are fully mature and begin to split open, revealing the seeds inside.
- Swamp milkweed (Asclepias incarnata): Seed pods mature in mid to late summer, usually between July and August. Collect seed pods when they have turned brown and feel dry to the touch.
- Butterfly weed (Asclepias tuberosa): Seed pods mature in late summer, usually between August and September. Collect seed pods when they have turned brown and begin to split open, revealing the seeds inside.
- Poke milkweed (Asclepias exaltata): Seed pods mature in late summer and early fall, usually between August and September. Collect seed pods when they are fully mature and begin to split open, revealing the seeds inside.
- Whorled milkweed (Asclepias verticillata): Seed pods mature in late summer and early fall, usually between August and September. Collect seed pods when they have turned brown and begin to split open, revealing the seeds inside.

Collection methods:

1. Locate native milkweed plants growing in a suitable area, preferably in a natural setting that has not been subjected to herbicides or pesticides. Seek permission from the landowner or governing authority before collecting any plants or seeds.
2. Choose plants that have healthy, robust growth and have produced a good quantity of seed pods.
3. Use sharp pruning shears or scissors to cut the seed pods from the stem. Avoid using your fingers, as this can damage the seed pod and reduce the quality of the seed.
4. Collect seed pods from several different plants, taking care not to remove all the pods from any single plant. This ensures genetic diversity and reduces the risk of over-harvesting.
5. Place the seed pods into a paper bag or envelope. Avoid using plastic bags, as they can trap moisture and cause the seeds to mold. Label the bag with the species name, date of collection, and location where it was collected.

Post-harvest:

1. Transfer the paper bag or envelope containing the seed pods to a warm, dry place and leave them to dry out for a few days. Ideally, the temperature should be between 65-75°F (18-24°C) and the relative humidity should be less than 50%.
2. Once the seed pods are fully dry, remove them from the paper bag or envelope and place them in a clean, dry container such as a plastic tub or glass jar. Avoid using metal containers, as they can interfere with seed germination.

3. Use a clean, dry tool such as a knife or scissors to open the seed pods and remove the seeds. Take care not to damage the seeds or the delicate tuft of fluff that surrounds them.
4. Remove any debris or damaged seeds from the mixture, and separate the remaining seeds from the fluffy material (chaff). This can be done by sifting the mixture through a fine-mesh strainer or by gently blowing on it.
5. Store the cleaned seeds in a paper envelope or bag labeled with the species name, date of collection, and location where it was collected. Place the envelope or bag in a cool, dry place, such as a refrigerator or freezer. A temperature of 32-41°F (0-5°C) is ideal.
6. Check the seeds periodically for signs of mold or moisture, and discard any seeds that appear to be damaged or contaminated. Properly stored seeds can remain viable for up to 3 years.

By following these collection, post-harvest, and storage methods, you can increase the likelihood of successfully growing native milkweed from seed and contribute to the preservation of these important plants.