

FOREST FRUIT PRODUCTION



Fleshy fruit is a key food resource for both game and nongame wildlife. Land managers need to know how land uses affect fruit production, and how it changes over time. We quantified fleshy fruit abundance for 5 years in both young, recently harvested and mature forest stands of 2 forest types in the southern Appalachians of North Carolina- drier upland hardwoods and moister cove hardwood forest types.

Our research shows:

- Fruit biomass is low and relatively constant in mature upland and cove hardwood mature forest types.
- Fruit production was higher in young stands than mature forest beginning about 2 years post-harvest.
- About 5 years after harvesting, about 0.6 kg of dry edible fruit pulp was produced per hectare in the mature cove hardwood forest, and about 16 kg/ha was produced in the young upland hardwood stands.
- A few species dominated fruit production, but dominant species differed among treatments and years.
- Pokeberry and blackberry dominated fruit production in young stands.
- Many herbaceous and tree species also produced more fruit in young stands than in mature forest.
- Fruit availability was highest during summer and early fall.
- American holly, sumac, and greenbriar retained fruit during winter.
- Fruit availability varied spatially and temporally due to differences in species distribution and fruiting phenology.
- In the southern Appalachians, young, recently regenerated stands provide abundant fruit compared to mature forest stands and represent an important source of food for wildlife for several years after harvest.

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