



Appalachia-Science
in the Public Interest

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GUIDE TO USE OF NON-TIMBER PRODUCTS

Take a Mess; Don't Make a Mess My grandma's adage is worth repeating to the many do-gooders in our region, who have generated considerable recent discussion, by seeking to utilize non-timber forest products (NTFPs). She emphasized that we only need to gather enough greens for a spring "mess" or tonic but little more - unless it is blackberries or firewood for a neighbor. The rule holds fairly well today, even though we would applaud commercial goat herds in kudzu or ivy patches. The wild things of the forest should not be commercialized. It would be far better to put our eggs into the baskets of local tourism or to welcoming back retirees.

Striving for an NTFP (Non-Timber Forest Products) Ethic Each year we hear more and more about cash-starved Appalachian woodland owners (whether resident or distant landholders) selling their birthright to fly-by-night chip mill operators. Those who encourage harvesting and selling NTFPs instead are only a slightly better cut. Harvesting some NTFPs for our own good improves the quality of our lives and can preserve the health of the forest, but on a commercial scale, virtually any portion of a wild landscape is at risk. It is wise to oppose a scatter-gun approach to NTFP harvesting, although some would argue that it provides supplemental incomes from a wide variety of economic sources under free market conditions. However, we all know that American society rewards those with the stickiest fingers.

No Smorgasbord Approach The herb St. John's wort is used by a growing number to relieve mild depression, but many potential gatherers most likely don't know what variety to look for, where it grows, much less how to preserve it. Giving unscrupulous harvesters too much information is imprudent, and linking their poaching with unscrupulous marketers is doubly so. Perhaps 100,000 Kentuckians alone along with a greater number of other central Appalachians own small woodland plots and are tempted to sell their forest to chip mills for paltry sums. They overlook the changing harvest picture, for chain saws cut far more than yesteryear's crosscut and heavy machinery makes a far greater impact on the understory than the horse. Likewise commercializing understory plants may have just as drastic effects.

Advantages of a Non-Timber Product Inventory

Some will argue that there are advantages of moderate NTFP harvesting from native stock.

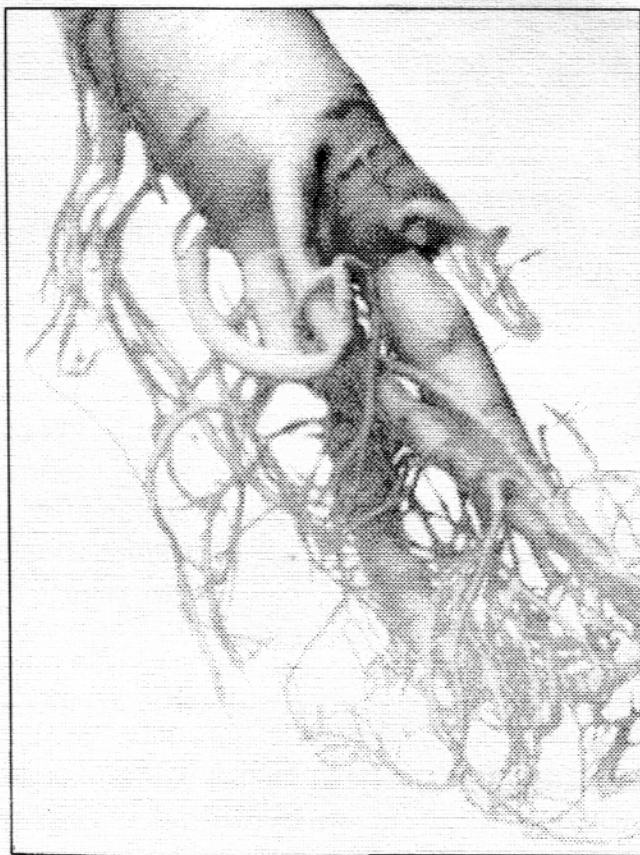
It leads to knowledge of the forest for its own sake If we know NTFPs we will value the forest better for its own sake. Its vast diversity and the complexity of interacting systems are worth studying, reflecting upon and defending. Through knowledge we can appreciate the marvels of our forest treasures and transmit that knowledge to others who in turn, will adapt a more moral and ethical stance with respect to our fragile forest systems.

It helps us save our forests The best manner of saving our forestlands from excessive exploitation is to work for programs that require trees and biodiversity for the livelihood of people. Some of these are indirect such as scenic

views, climate moderation, soil retention, flood prevention, and enhancement of water table. Others are more direct, such as land use for recreational purposes (sightseeing, hiking, birdwatching, etc.). Biodiversity also allows for NTFPs such as wild edibles (mushrooms, fruits and nuts), decorative products (wreaths), medicinal products (ginseng, yellow root) and seeds.

It may open employment opportunities to resident woodland owners Information is forthcoming on the financial feasibility of NTFPs from existing and proposed programs at academic institutions, technical schools, extension services as well as the for-profit economic sector. Likewise, a number of state farm and forest agencies are seeking markets for people, especially those who are tobacco farmers and find their own traditional livelihood being threatened by regulations on smoking and foreign competition.

It may reveal specific non-timber products that give added value to the land One ginseng grower has found that the value of his land increased considerably by the fact that ginseng is found and grown there.



Disadvantages to Excessive Information

A smorgasbord approach of tantalizing non-suspecting Appalachians with economic plums is fraught with environmental dangers and an excellent way (given the greedy climate of ginseng poaching in the region) to turn even relatively abundant wild plants into threatened and endangered species virtually overnight. What has happened in the past few years to relatively abundant wild ginseng in many states could happen in financially starved communities elsewhere, if encouragement is given to potential gatherers.

Information may lead to improper harvesting practice A few years back an expert Appalachian naturalist and Cherokee, Hawk Little John, denied our request to document him gathering wild herbs because of the likelihood that information would fall into the wrong hands, namely, budding poachers. We now see his position perfectly.

A purely economic stance is quite confusing in our age Merely accepting the argument that non-timber products increase land value can have an effect of conceding the primacy of the economic argument over that of ecological considerations for their own sake. Unfortunately, this age champions the bottom line spelt out in dollars and cents. The forest's value is defined by the marketplace for the great majority of people and it will take more education to make profound changes.

The superficial approach to NTFPs is the more fundable An added ingredient in the caldron of advantages and disadvantages is that mere inventorying and general information gathering on a wide variety of NTFPs takes little scientific effort. Well worded proposals appeal to funders knowing little about Appalachia except stereotypical ignorant folk awaiting enlightenment by grantees with access to scattered information. This is patronizing at best and an invitation to environmental degradation at worst - and such projects are being conceived. On the other hand taking one product and determining its cultivation conditions over time is hard work, takes precise observational skills, is fraught with possible negative results and is virtually non-fundable.

Seeking an Ethic We are convinced that product by product assessment may be the most cost effective and ecological manner to proceed. ASPI has worked on NTFPs for a number of years with the publication of *Appalachian Edible Wild Plants* (1993), *Alternative Forest Products* (1994), *Mushroom Culturing in Appalachia* (1995), *Ginseng in Appalachia* (1996), and *Native Vermiculture* (1998). The first three involve considerable surveying but do not give explicit details on how or where to gather for marketing products - or details on markets. *Appalachian Edible Wild Plants* is clearly meant to be a guide for supplementing food needs for residents. *Alternative Forest Products* was the subject matter from talks given at ASPI as part of the series of the Kentucky Organic Growers in 1994. While there is a more economic flavor to this paper, it does detail a great variety of threatened or endangered plant species, but does not depict them in great detail.

Product Selection Criteria It is obvious that the NTFP candidate for consideration should be neutral at best and not harmful to users or others, thus the rationale for promoting tobacco substitutes. To arrive at a comprehensive ecological/economic position demands that we develop a selection criteria for the wide range of non-timber forest products. We want to give forest residents means of livelihood and at the same time enhance the health of the forests themselves. The criteria must be mindful of both economics and ecology. Maximum income does not necessarily mean taking a scatter gun approach of listing all products that have some sales value. A better method is to find a few that demand a healthy forest for growing, and for which the product's removal will not hurt other products. We are convinced that both virtually wild ginseng and native earthworms meet selection criteria and can be easily harvested in a sustainable manner.

Other selection criteria include: the virtually wild NTFP should not contaminate the area with exotics; harvesting the product does not damage the forest; and the products offer a good return after initial investment. Ginseng's Asian markets alone are said to total 12 billion dollars and that does not include the vastly expanding North American and European markets.

Potential Additions *Ginseng in Appalachia* introduces a marketable product obtained as virtual ginseng. The same philosophy continues to be expanded in *Native Vermiculture*. ASPI's endorsement of these two product classes along with mushrooms does not exclude other NTFPs. Only well researched cultivated NTFPs should be encouraged. Considering the few products that ASPI gives endorsement, this will take scientific and silvicultural research. This work makes ecological sense and the accumulated wisdom of years of research is needed. Once the green light is given, these approved NTFPs could be sold using a marketing card that indicates that the product was grown on one's own landholding. This safeguards the cultivated property through a supervised marketing system and combats the very dangerous practices of poaching and black-marketeering.

Market Controls Those of us closely associated with burley tobacco growing know about this highly successful sixty year old loan program which allows growers to bring products to controlled markets. When a crop does not sell at the graded price level, it is purchased by the cooperative through loan money supplied by the Commodity Credit Corporation, a lending arm of the USDA. This pooled tobacco is later sold when the price improves. Granted this works well for a commodity like tobacco that actually stays the same or improves with shelf-life. That is hardly the case of most NTFPs, but there exists an added difference that some commodities like ginseng has a vastly larger potential market than is currently being met. Thus the market controls would not be on amounts of production, only marketing procedures. Here is a controlled farm commodity market model awaiting replication - and the state of Maine is doing this with ginseng.

Conclusion NTFP research should be concentrated in the following areas: how to obtain a low-impact, high quality, marketable commodity that is virtually wild in cultivation; and how to protect this commodity from poaching through a viable marketing system controlled by growers with some support by state/Federal governments.

A Pledge

KNOWLEDGE - I WILL BE A CHAMPION OF A HEALTHY DIVERSE FOREST AND RESOLVE TO KNOW THE MULTITUDE OF PLANTS THAT COMPOSE THE FORESTLAND UNDERSTORY.

COMMONS - I AFFIRM THE COMMONS OF ALL FORESTLANDS AND THE MATERIALS THAT GROW THEREIN. WE ARE STEWARDS OF THE LANDS UNDER OUR CONTROL AND NOT ABSOLUTE ARBITERS OF PARTICULAR FOREST PRACTICE. THUS WE ARE ACCOUNTABLE TO THE LAWS AND REGULATIONS THAT WILL PRESERVE FORESTS FOR FUTURE GENERATIONS.

VALUE - I BELIEVE THAT PLANTS AND NTFPS HAVE AN INTRINSIC VALUE APART FROM CURRENT OR FUTURE ECONOMIC USES. THEIR PRESENCE AND BIODIVERSITY IS A RICHNESS IN ITSELF WORTH ESPOUSING AND PRESERVING.

RESPECT - I RESPECT THE PRIVATE OWNERSHIP HABITS AND BOUNDARIES OF OTHER FORESTLAND PROPERTY HOLDERS AND WILL NOT TRESPASS OR REMOVE PLANTS FROM THESE LANDS WITHOUT THEIR PERMISSION.

PRUDENT REVELATION - I REFRAIN FROM TELLING OTHERS ABOUT ANY SPECIES THAT COULD BE OF ECONOMIC VALUE UNLESS I AM CERTAIN THE PERSON WILL NOT HARVEST OR ENCOURAGE OTHERS TO HARVEST THE PLANT IN AN UNSUSTAINABLE MANNER. I RECOGNIZE THE PROPENSITY OF MANY TO BE IMPRUDENT IN THEIR RELATION TO FOREST PRODUCTS.

PROTECTION - I WILL NOT INTRODUCE EXOTIC SPECIES INTO THE FOREST THAT MAY THREATEN THE NATIVE ECOSYSTEM, NOR WILL I ENGAGE OR ALLOW EXCESSIVE UNSUSTAINABLE TIMBER HARVESTING OF THE FORESTLANDS UNDER MY CONTROL. FURTHERMORE, I WON'T INTRODUCE RELATED SPECIES THAT MAY INFECT THE GENETIC POOL OF THE NATIVE SPECIES PRESENT.

PRESERVATION - I WILL NOT REMOVE OR ENCOURAGE OTHERS TO REMOVE PLANTS THAT ARE RARE, ENDANGERED OR THREATENED SPECIES, OR THAT NEED PROTECTION.

ENHANCEMENT - IF PHYSICALLY ABLE, I PLEDGE TO IMPROVE THE QUALITY OF MY NEIGHBORING OR PRIVATE WOODLANDS BY CAREFUL FOREST MANAGEMENT THAT INCLUDES REMOVING EXOTIC SPECIES THAT THREATEN THE BIODIVERSITY OF THE FOREST UNDERSTORY. MAY OTHERS DO THE SAME.

GREEN ECONOMICS - I PLEDGE TO FAVOR SPEAKING ABOUT ECONOMICALLY VIABLE NON-TIMBER FOREST PRODUCTS THAT WILL, IN TURN, DEMAND A HEALTHY FOREST AS A CANOPY AND THUS A NECESSARY COVER FOR THE CROP TO BE SUCCESSFULLY HARVESTED.

SUSTAINABLE HARVEST - I WILL ONLY TAKE FROM THE FOREST FOR ECONOMIC OR OTHER REASONS THOSE AMOUNTS AND IN A MANNER THAT WILL ALLOW THE PLANT TO REPRODUCE AND THRIVE IN THE FOREST.