

## **GUIDELINES FOR PERMITTING AND CERTIFICATION OF WILDLAND COLLECTED SEED**

Large-scale disturbance of ecosystems, whether human-caused or the result of natural events (e.g, fire, floods, etc.), frequently requires mitigation to restore, revegetate, improve, or stabilize natural communities. Demand for the resources needed to complete corrective and improvement activities increases with increases in human activity on these communities. Seeds needed to accomplish these corrective measures are a basic resource often limited in quantity and quality. To meet present and future demands, sufficient quantities of seed from numerous species must be available at reasonable cost. Though many species may be suited for field cultivation, seeds of a majority of species will continue to be collected from wildland populations.

Much of these wildlands are public and permits are required for harvesting. Considerable inconsistency exists among and within each Land Management Agency (LMA) on how and when permits are issued. This is due, in part, to incomplete knowledge by LMA personnel of the market dynamics peculiar to this industry resulting in difficulty in assessing appropriate fees. Ultimately, inconsistency creates frustration, resulting in low levels of compliance, a phenomenon experienced with other specialty products collected from public lands.

One mission of LMA's is to promote development of rural economies, as long as this can be done without jeopardizing resources. Responsible seed collecting is compatible with other uses (e.g, livestock grazing, recreation, etc.) and has little or no long-term effect on stand health. Requirements placed on collectors and brokers should not be burdensome. Clearly, by collecting and marketing seeds from hundreds of species, this industry provides a resource that can not be obtained by any other reasonable means.

Many species are represented by numerous genetically distinct races or ecotypes. They reflect differential adaptation to variation in soils, climates, disturbance regimes, etc. across the species range of distribution. Success in using a particular species is often dependent on the use of seed from an adapted race. Although races of a few species have had considerable testing, huge gaps remain in our understanding of race adaptability for most species. Consequently, decisions about which race to seed on a particular site should generally be based on an evaluation of the physical and biological environment of the collection and seeding sites. Unfortunately, seed users have found accurate collection site information to be largely unavailable.

In response to these concerns the Utah Interagency Plant Materials Committee organized and sponsored a workshop in March 1993. Representatives from LMA's, the State Seed Certification Agency (SCA), State seed testing laboratory, private industry, and research community were invited to spend 2 days identifying problems and developing solutions. Recommendations have been modified after additional review by various parties connected to the industry. The following guidelines are the product of this process. Implementation of these guidelines by LMA's, collectors, dealers, and SCA's would do much to correct the problems

associated with the collection and use of seed from wildland populations.

## **I. PERMITS FOR SEED HARVEST ON PUBLIC LANDS**

Seed collectors are most likely to comply with permit requirements when consideration is given to their concerns. Because collectors often travel long distances for seed (and permits), they need flexibility in purchasing permits. Circumstances sometimes allow and/or require a long lead time for permit purchase, while other times this is not possible. In either case, permits must be available during all office hours and on a daily basis. Permits should preferably be valid on large geographic areas, such as BLM or Forest Service districts. However, smaller resource management areas may be specified. Consistency within LMA's is critical. These guidelines address the needs of both LMA's and collectors concerning requirements for seed collection permits.

### **LMA responsibilities**

1. Complete and have on file all required Environmental Assessments required by law prior to the harvest season. Many species can be covered in resource management plans and not require a specific EA.
2. Set fee schedule prior to season. Fees should be incremental according to species and based on a given quantity of bulk seed in field condition. For example, \$.10/lb. for antelope bitterbrush seed or \$.20/lb. for globemallow. Collectors must be informed that there are no refunds on the permit fee for collecting less pounds than expected. However, if more seed is available than expected, the LMA may increase permit pounds allowed upon notification and payment of additional fees (unless LMA target poundage limits have been reached for a given resource area).
3. Issue permits and collect fees at district offices based on anticipated harvest for each species in resource area. Multiple species could be listed on a single permit. Permits should specify the LMA district office issuing the permit, permittee(s), contact address and phone number, permit number, permitted season (generally the calendar year unless otherwise specified), species, collection area, and estimated quantities to be harvested. Permits must be signed by permittee(s) indicating that information concerning restrictions, exclusions, and other guidelines for seed harvest have been received.
4. Provide additional printed information to collectors at the time of application, such as:
  - a. exclusions (geographic areas, species, dates, collection methods, etc.)  
Note: Although in some circumstances motorized collection should

be excluded, mechanical or motorized collection should be excluded, mechanical or vehicle-aided collection is sometimes the preferred method.

- b. vehicle/access restrictions.
- c. a warning of the consequences of harvesting without a valid permit or outside the exclusions or restrictions of the permit. Penalties could include loss of collected seed and/or picking privileges.
- d. cautions concerning accidental inclusion of noxious weed seed and premature harvest.

### **Collector responsibilities**

1. Purchase and sign permits for each species to be harvested in the district before starting collection. The fee paid for each species at the time of purchase is based on the collector's estimate of expected harvest.
2. Abide by all exclusions and restrictions provided when the permit is purchased.
3. When potential harvest exceeds the estimate, notify LMA for permit adjustment and additional payment of fees.

### **Other recommendations**

1. Fee schedules should be uniform within each LMA. A committee or board could be established to assist LMA's in establishing master species lists and standard fee schedules. This board should have representation from the LMA, seed industry, and research community. Due to narrow profit margins, the costs associated with obtaining permits will usually be passed on to users, which is frequently the same LMA. For this reason, a fee of approximately 5% of field value (first sale) of the seed based on a 5 year average, is recommended.
2. Seed collection permits do not grant exclusive rights to a particular stand or population of plants. Such rights can only be obtained through a contract/bid process.
3. Permit forms and procedures must be standardized within each LMA.

## **II. CONTRACTS AND BIDS**

A LMA may decide to offer for sale seed from a specific stand or geographic region. These areas must be listed as excluded prior to issuing general collection permits, thus granting exclusive collection rights to the individual(s) holding the contract. Exclusions and restrictions must be clearly stated on the invitation to bid.

### **LMA responsibilities**

1. Estimate potential yield and value of the seed crop.
2. Complete appropriate Environmental Assessments.
3. Prepare invitations to bid, with all pertinent terms, restrictions, and exclusions defined.
4. As conditions permit, conduct on-site spot checks during collection to assure compliance with contract/bid specifications and exclusion of non-authorized collectors. By signing contract/bid sheets during these checks, LMA representatives could provide evidence for seed certification.

## **III. SEED CERTIFICATION**

The Association of Official Seed Certifying Agencies (AOSCA) has published "Pre-Variety Germplasm Certification Standards" for the certification of germplasms which have not reached varietal status, and "Woody Plants and Forbs Certification Standards" and "Grass Certification Standards" for certification of seed of germplasms which have been released as a variety. These standards apply to either wildland collected or field produced seed, and offer a reliable way for the seed industry to offer seed of races or ecotypes to the buyer with genetic identity maintained along with accurate collection site information.

According to these certification standards, a race or ecotype of a native or naturalized species may be categorized into one of four classes:

- (a) Source Identified (yellow tag) -- Comparisons with other germplasm collections, accessions, or ecotypes of the same species not known.
- (b) Selected (green tag) -- Shows promise of superior and/or identifiable traits as contrasted with other germplasm accessions, ecotypes, or variety/cultivars of the species. Selection criteria and supporting comparative data is required.

- (c) Tested (blue tag) -- Requires progeny testing to prove that traits of interest are heritable in succeeding generations. Testing procedures (number of sites, generations required, etc.) are outlined for each species by certification agencies.
- (d) Variety (Foundation {white tag}, Registered {purple tag}, and Certified {blue tag} generations) -- Applicable to a Tested germplasm which, in the estimation of the developer, has sufficient marketplace potential to warrant release as a variety in compliance with Federal and State seed laws.

**A. Seed Certification Agency responsibilities:**

1. Develop and print a Certified Seed Site Identification Log sheet for use by seed collectors. These logsheets will be available from seed brokers (dealers and conditioners) and from the SCA and other agencies. This log will serve as a way to organize information such as:
  - a. Collectors name, address, and telephone number
  - b. Permit number, contract number, private land designation, etc.
  - c. Species and common name.
  - d. Location (State, County and elevation). It is strongly recommended additional information such as soil type, aspect, and associated species be given as this information would be extremely useful to the end user.
  - e. Date(s) collected.
  - f. Amount collected.
  - g. Lot designation (must be indicated on bag or container also)
  - h. Signature of collector that the information is correct.
  - i. Signature of seed broker that to his knowledge information is correct.
2. Evaluate completed log sheets, seed broker's records, and related documents in determining certification eligibility of seed lot. Conduct thorough investigations on at least 5% of eligible seed lots, including verification of paperwork and prior and/or retroactive field inspection of collection sites to verify that stands are capable of producing the amount of seed indicated. Evidence of falsified logs or documents may result in loss of certification privileges.
3. Attach an official Source Identified, Selected, Tested, or variety tag with appropriate site and germplasm information to individual bags of eligible seed lots.

**B. Collectors responsibilities**

1. Obtain, as applicable, a permit or contract/bid (for public lands) or written permission (for private lands) prior to collection.
2. Keep a Certified Seed Site Identification Log for seed for which certification tags are desired.
3. Upon first sale, the collector will present to the seed broker copies of applicable LMA permits or private land permission documents, and signed logsheets pertinent to the seed being sold.

**C. Seed Broker Responsibilities**

1. Inspect information provided on permits and logsheets and sign log sheets to attest that the information is correct to the best of his or her knowledge.
2. After cleaning and conditioning, have seed sampled, tested and labeled according to all SCA, State and Federal regulations.
3. Make available to SCA representative all records on certified seed lots.
4. Obtain permission from SCA before blending lots of certified seed.
5. Pay fees for certification. Fees of \$25.00 per lot plus \$1.00/cwt. are suggested to cover costs. Other fees such as mileage and/or hourly charges may be assessed in situations where additional service is required.

Guidelines compiled by:

Stanley Kitchen  
USFS Shrub Lab  
Provo, UT 84601  
(801)377-5717

Stanford Young  
UCIA, USU  
Logan, UT 84322-4855  
(801)797-2082