
**PROGRAM GUIDE & EVALUATION FOR
PROFESSIONAL LANDSCAPE MANAGEMENT
PROVIDERS**

Version 1.4

March 22, 2023



**GREEN
SHIELD
CERTIFIED**

®

Pest control. Peace of mind.

**GREEN SHIELD CERTIFICATION® for
PROFESSIONAL LANDSCAPE
MANAGEMENT PROVIDERS**

Guiding Principles

These principles form the basis for the GREEN SHIELD CERTIFIED program. Evaluations for professionals, organizations, products and services are designed to assess compliance with these principles.

Knowledge. GREEN SHIELD CERTIFIED participants understand IPM principles and practices. They can identify important pests and describe life cycles, habits and conditions that affect populations.

Monitoring and inspection. GREEN SHIELD CERTIFIED participants use monitoring and inspection to stay fully informed about pest populations and conditions that can lead to pest problems.

Action only when necessary. GREEN SHIELD CERTIFIED participants supplement their experience with monitoring and inspection to determine when to act against pests. Routine application of pesticides is not IPM.

Documented performance. GREEN SHIELD CERTIFIED participants record monitoring and inspection results. They document their performance and justify pesticide applications.

Least-toxic options. GREEN SHIELD CERTIFIED participants use non-chemical approaches as the first line of defense against pests. GREEN SHIELD CERTIFIED participants evaluate all pest management options for hazards to health, the environment and beneficial organisms.

Effective pest management. GREEN SHIELD CERTIFIED participants solve pest problems including insects, weeds, vertebrates and microbes with effective, long-term strategies. Structural design and maintenance issues that contribute to pest problems are addressed, where appropriate.

Continuous improvement. GREEN SHIELD CERTIFIED participants prepare for changes in pests and IPM techniques, recognizing that improvement involves staying abreast of new technologies and concepts.

Communication and outreach. GREEN SHIELD CERTIFIED participants communicate the IPM approach to others. They abide by posting and notification requirements for pesticide applications.

Reduction in health and environmental hazard is the bottom line. High priority hazards are identified and targeted for reduction.

GREEN SHIELD CERTIFICATION is available for professionals, organizations and pest management products and services. For more information, contact the IPM Institute or visit www.ipminstitute.org.

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GREEN SHIELD CERTIFIED Program Guide: Professional Landscape Services

Professional landscape service providers may certify their entire business or a specific service offering.

To become a GREEN SHIELD CERTIFIED service provider, you must:

- Step 1.** Contact the IPM Institute to schedule an evaluation that will be conducted on-site at your office using this evaluation form.
- Step 2.** Pay the evaluation fee (\$1250 plus travel) and undergo the on-site evaluation. Your post-evaluation report from the IPM Institute will identify any improvements required prior to certification.

Certification is effective for three years and must be renewed annually. Your annual renewal fee is based on a sliding scale according to employee size of your company.

These fees support continuing operation of this program and provides:

1. A certificate suitable for framing (and duplication for use in multiple buildings within a certified system). A wall plaque and additional pre-printed certificates may be ordered for an additional charge. The Green Shield Certified logo will also be available for your use on company documents.
2. A summary of the program and your company's achievement for your posting on the IPM Institute website and for your use with local media, staff and others in your community.
3. Certification by the IPM Institute for three years, a profile of your company's program on GreenshieldCertified.org, Midwestgrowsgreen.org and LawnandLand.org, a subscription to the Green Shield Certified and Midwest Grows Green newsletters and free or discounted access to Midwest Grows Green Lawn & Land Forum webinars and workshops (see LawnandLand.org).

Scoring by the Evaluator

First, the evaluator will verify that the minimum requirements (pass/fail items) are met. Next, the evaluator will score each organic or plant health practice in the scored practices according to the following point system:

0 = Poor: the practice was either not found or violates the description.

1 = Needs Improvement: more can be implemented for this practice.

2 = Satisfactory: the practice is in place as described

3 = Exceptional: the practice in place exceeds the description.

NA = Not applicable

The evaluator will note any unsatisfactory, exceptional or non-applicable items, and may make note of any other items of interest. Notes may be made on the evaluation form or attached in a separate document. The service provider must, also, identify at least one meaningful area for improvement to address over the next three years. After completing the evaluation, the evaluator will tally the points earned. All minimum requirements must be scored as "Pass" and minimum of 80% is required for the scored section.

Confidential Evaluation Form

A. Service Provider Information

This form will be completed by an IPM Institute-approved evaluator during an on-site visit to the Service Provider and submitted by the evaluator to the IPM Institute for review. Service Provider will receive a completed copy along with the full, confidential evaluation report from the IPM Institute. Service Provider will have an opportunity to review all reports and provide corrections or updates. **Each business operating location (i.e., office with separate staff, inventory, etc.) must be evaluated separately.**

Evaluation for: _____
(service provider business name)

Applying for (circle one): Entire Company Service (see requirements, page 7)

Business license no(s)/state(s): _____

Evaluation location (street address): _____

City, State, Zip: _____ Phone: _____

Service provider representative(s) and any others present for evaluation. Include both regulatory and voluntary certifications, e.g., professional association certifications.

Name, title: _____

Certifications/licenses (agency/category/no./exp date): _____

Name, title: _____

Certifications/licenses (agency/category/no./exp date): _____

Name, title: _____

Certifications/licenses (agency/category/no./exp date): _____

Employees (attach existing list or additional pages as needed to list all employees)

Name, title: _____

Certifications/licenses (agency/category/no./exp date): _____

Name, title: _____

Certifications/licenses (agency/category/no./exp date): _____

A. Service Provider Information (continued)

Service Provider Profile: The evaluation report will include a narrative profile of the service provider to be published on the IPM Institute website once certification is achieved. Service provider will have an opportunity to review and revise the profile before publication.

a. Number of locations:

b. Number of employees:

c. Number of clients/acres serviced:

d. When was business founded?

e. Founder name(s):

f. Geographic location(s) (e.g., counties) served:

g. Market segments, types of service(s) offered (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> residential | <input type="checkbox"/> landscape design |
| <input type="checkbox"/> commercial | <input type="checkbox"/> landscape construction |
| <input type="checkbox"/> schools | <input type="checkbox"/> landscape maintenance |
| <input type="checkbox"/> childcare facilities | <input type="checkbox"/> weed management |
| <input type="checkbox"/> hospitals | <input type="checkbox"/> insect management |
| <input type="checkbox"/> nursing homes | <input type="checkbox"/> disease management |
| <input type="checkbox"/> other (describe): | <input type="checkbox"/> other (describe): |

A separate GREEN SHIELD CERTIFIED evaluation is available from the IPM Institute for structural pest management (e.g., indoor pest control).

h. When was the IPM/sustainable/organic program initiated?

i. Why was the IPM/sustainable/organic program initiated?

j. Why is IPM/sustainability/organic important to the service provider?

B. Definition of Service

A Service Provider may apply for certification for its entire business, *i.e.*, the company offers only certified services. In that case, skip this section and move the following page.

If the Service Provider is applying for certification limited to a specific service offering, score the following as Pass or In Progress. Any items rated as In Progress must be resolved prior to offering the certified service.

- PASS** **IN PROGRESS** a. The service to be certified must be offered under a distinct service or brand name. All services offered under the distinct name must meet GREEN SHIELD CERTIFIED requirements.
- PASS** **IN PROGRESS** b. The Service Provider must undergo an on-site evaluation by the IPM Institute and must meet all minimum legal requirements (page 9), pesticide safety requirements (page 22) and business practice requirements (page 10) for the entire company. The service to be certified must be in conformance with the remainder of the GREEN SHIELD CERTIFIED standards.
- PASS** **IN PROGRESS** c. A written contract or service agreement must identify the certified service as a distinct product offering. All services delivered to the location(s) by the Service Provider under the contract must meet GREEN SHIELD CERTIFIED standards. Records for accounts receiving the certified service must be segregated or otherwise immediately identifiable for evaluation.
- PASS** **IN PROGRESS** d. A separate training program must be offered by the Service Provider for staff selling or delivering GREEN SHIELD CERTIFIED SERVICE. Staff who have not completed the training may not sell or deliver the GREEN SHIELD CERTIFIED SERVICE. A written training log including curriculum, dates and attendees must be maintained.
- PASS** **IN PROGRESS** e. After certification of the service is approved by the IPM Institute, Service Provider may describe the service as a “GREEN SHIELD CERTIFIED SERVICE.” Service Provider may not use the words “GREEN SHIELD CERTIFIED SERVICE PROVIDER.” The GREEN SHIELD CERTIFIED name and logo must only be used in conjunction with the certified service name when it appears in company literature or electronic communications including websites.

Notes:

C. Expansion of Service (Only for reevaluation)

GSC for Landscapes determined that a certified service can only reduce its human health and environmental hazards through continually increasing the size of land managed or of clients purchasing the GSC certified service.

GSC's desired threshold for expansion of service is a net 20% increase of clients or acres managed by the GSC service every three years. If the GSC service does not exceed the 20% increase by reevaluation, it will lose its certification.

The GSC client has the opportunity suggest a different expansion of service target for their certified service if 20% is impractical or not aggressive enough. The GSC evaluator will need to formally sign this document to accept or deny any target that deviates from the initial 20% threshold.

By the next reevaluation, the GSC client agrees to expand its service by:

Circle one: 20% or Custom: _____

The GSC evaluator accepts this expansion of service target:

Circle one: **Yes** **No**

Signature: _____

Clients on GSC Service during last evaluation: _____

Clients on GSC Service during this evaluation: _____

PASS IN PROGRESS

Notes:

D. Requirements for All Services

I. Minimum Requirements for Certification

To become a GREEN SHIELD CERTIFIED service provider or to offer a GREEN SHIELD CERTIFIED service, a “pass” rating is required on each of the following minimum requirements (pages 9-10). The evaluator will circle the appropriate rating and supplement his or her decision with notes, including describing where the service provider exceeds the minimum requirement and any extenuating circumstances on failed items.

1.0 Service provider meets legal requirements:

- a. For pesticide applicator training, licensing and certification.
- b. For pesticide applicator safety and employee right to know.
- c. For posting and notification of pesticide applications.
- d. For pesticide application record keeping.
- e. For identification of service vehicles and employees.
- f. For any specific environments serviced (*e.g.*, schools, list below).
- g. For truth in advertising, *i.e.*, provider meets advertised claims.

Notes:

D. Requirements for All Services (continued)**I. Minimum Requirements****2.0 Service provider business practices and stability.**

- a. Business has been operating for three or more years.
- b. Business license to operate has not been suspended or revoked in the last three years.
- c. Business has not had regulatory action against it from a state or federal regulatory agency within the past three years.
- d. Business or business principal has not filed for bankruptcy in the past three years.
- e. Business has no unsatisfied liens or outstanding judgments against it.
- f. Business has no unsatisfied liens or outstanding judgments against it. Provides a written organic or plant health service contract to customers including a written customer satisfaction guaranty. **Attach an example copy of the service provider's contract to this audit form.**
- g. Business holds a current general liability policy. **List insurer, policy number, overall coverage limit and agency contact information below.**

Notes:

D. Requirements for All Services (continued)

II. Scored Practices

Service provider must earn at least 80% on the scorecard (page 34). The evaluator will score each of the following items as poor (score as 0), needs improvement (score as 1), satisfactory (score as 2), exceptional (score as 3) or not applicable (NA). Explain any unsatisfactory or non-applicable scores or exceptional performance.

Bonus items add to but do not detract from the score. Where appropriate, address unsatisfactory scores in the list of planned improvements (page 35).

1.0 Service provider commits to an organic or plant health program in writing.

- _____ a. A written policy states a commitment to organic/sustainable/plant health-centered service implementation. (Attach copy.)
- _____ b. The policy describes overall objectives relating to human and environmental health.
- _____ c. The policy is used to guide decision-making when operational questions arise.
- _____ d. The policy is reviewed and revised as needed to reflect current conditions.
- _____ e. Service provider develops a soil and pest management plan for each customer, detailing visit schedule, soil testing and monitoring program, cultural measures and control methods for common pests and weeds including action thresholds, non-chemical tactics and pre-approved pesticides and amendments. A boilerplate plan developed by the service provider may be used as the basis for each client's plan.
- _____ f. Service Provider offers a sample written outdoor plan. The plan addresses the following (poor <= 2 bullet points, needs improvement between 2-4 bullet points, satisfactory between 5-6 bullet points, exceptional = 7 bullet points):
 - Management protocols for outdoor animal and insect pest populations as well as invasive plants and fungi.
 - Best management practices that reduce chemical use, energy and water use, air pollution, solid waste, and chemical runoff such as gasoline, oil, antifreeze and salts.
 - Erosion and sedimentation control for ongoing operations and future construction activity.
 - Diversion of landscape waste via mulching, composting, or other low-impact means.
 - Practices to minimize or eliminate chemical fertilizer use.
 - Integrated methods, site maintenance, routine pest inspections and pest population monitoring.
 - Schedule for inspection and monitoring of buildings and grounds, specification of the circumstances under which an emergency application of pesticides can be conducted, and a communication strategy directed at building occupants that includes universal notification.
- _____ g. When initiating service with a new client, service provider conducts an initial inspection and interview to determine appropriate thresholds, any specific client concerns to aid in customizing the pest management plan.

Notes:

____ SCORE TOTAL, PAGE 11

D. Requirements for All Services (continued)**II. Scored Practices (continued)**

2.0 Education and training.

- _____ a. Service provider and management staff can identify pest-prone plants (key plants) and frequently encountered pests (key pests), and symptoms, life cycles and IPM management strategies for key pests found in the region where the business operates.
- _____ b. Service provider identifies beneficial insects, plants and other organisms that inhabit the managed property(s).
- _____ c. A written IPM, plant health, sustainable or organic landscaping training plan includes a schedule/protocol for new staff and for continuing education of existing staff.
- _____ d. A written record is maintained of trainings attended by all staff that provide the GSC service. Records should include date, location and course title and/or instructor.
- _____ e. Service Provider and/or principal staff belong to state, regional and/or national trade/professional organizations. **List below.**
- _____ f. Pertinent publications (written or on-line) are on hand to assist in pest identification, biology, and IPM/organic approaches. **List representative publications below.**
- _____ g. **Bonus:** Principal staff have been instructors for formal IPM or organic training/education events to individuals and/or groups outside of the business, *e.g.*, school, community or professional groups within the last three years. **List below.**

Notes:

_____ **SCORE TOTAL, PAGE 13**

E. DESIGN (Complete only if Service Provider offers design services)

I. Minimum Requirements for Certification

A “pass” rating is required on each of the following minimum requirements. The evaluator will circle the appropriate rating and supplement his or her decision with notes, including describing where the service provider exceeds the minimum requirement and any extenuating circumstances on failed items.

- IN PROGRESS a.** Lifecycle costs (costs over the life of the plant and landscape) are considered to choose plants with minimum maintenance needs and costs, including irrigation, pesticide and fertilizer applications.
- IN PROGRESS b.** To optimize plant health and minimize potential for pest problems, plants and placements specified are compatible with environmental conditions of soil type, US EPA ecoregions, USDA hardiness growing zones, light levels, moisture conditions and exposure to wind.
- IN PROGRESS c.** Plants and placements are appropriate to the mature size of the plant. The plants can be maintained without excessive pruning or topping that may negatively impact plant health. e.g. maximum plant height, root depth and width avoids power lines, walkways, underground drainage lines and does not obstruct views.
- IN PROGRESS d.** Non-native plants that require pesticide applications in order to maintain a healthy and attractive appearance under conditions typical for the site (i.e., key plants) are not used.
- IN PROGRESS e.** Plants which attract stinging insects are not used within three feet of building entrances or other sensitive areas.
- IN PROGRESS f.** Non-plant materials are non-toxic to humans, pets and wildlife, e.g., no CCA treated wood is used, and maintainable without toxic preservatives.
- IN PROGRESS g.** Invasive exotic plants are not used (plants listed by MIPN.org/plantlist/ or invasivespeciesinfo.gov/subject/lists), and aggressive native plants are properly contained by edging or other effective means.
- IN PROGRESS h.** Designer communicates orally or written the potential long-term property value each vegetation type can contribute.

Notes:

E. DESIGN (continued)**II. Scored Practices**

Service provider must earn at least 80% on the scorecard (page 34). The evaluator will score each of the following items as poor (score as 0), needs improvement (score as 1), satisfactory (score as 2), exceptional (score as 3) or not applicable (NA). Explain any unsatisfactory or non-applicable scores or exceptional performance.

Bonus items add to but do not detract from the score. Where appropriate, address unsatisfactory scores in the list of planned improvements (page 35).

- ___ a. Designs incorporate the zone concept, with high maintenance plants restricted to high use/visibility zones.
- ___ b. Plant diversity is used to reduce pest problems and visibility of pest damage to individual plants, with at least 10 species per 10,000 sq. ft.
- ___ c. Alternate hosts are not planted to break the life cycle, e.g., apple, crabapple and hawthorne are susceptible to cedar rust diseases only when cedars or junipers are also present. While infectious spores can travel hundreds of yards or more between these hosts, infection can be reduced by not including both rosaceous and cedar/juniper hosts in the same landscape.
- ___ d. Landscape fabrics/geo-textiles are used where appropriate to separate materials, e.g., to separate stone mulch from soil.
- ___ e. Walkways conform to “desire lines” (e.g., optimum paths of travel for site users) to reduce compaction and erosion when walkers take “short cuts.”
- ___ f. Edging is used to separate features and prevent plant or materials encroachment between walkways and mulched areas.
- ___ g. Area around tree trunks are mulched, welled or planted to minimize maintenance and reduce compaction and mower injury to trunk.
- ___ h. Mulch does not touch the tree’s trunk or bark (volcano mulch placements are not used).
- ___ i. 90% of clients contain a significant portion of non-invasive native plants. Significant is defined as 75% of aerial cover or more as determined by ocular estimates.
- ___ j. BONUS: Landscape plans include a site for composting and compost odor management plan.
- ___ k. BONUS: Water and/or shelter for beneficial wildlife is provided. (e.g., bat houses, birdhouses, large native shrubs, leaf litter or trees).
- ___ l. BONUS: Designer prioritizes plantings with high long-term ecological value for properties (i.e. native plants of trees and shrubs that likely will stay on the property for 10+ years)

Notes:

____ **SCORE TOTAL, PAGE 15**

E. DESIGN**II. Scored Practices (continued)**

- _____ m. Mowing strips are used to minimize maintenance and herbicide use along fencelines, paved areas, planting beds, etc.
- _____ n. Underlayments are used to minimize maintenance and herbicide use, e.g., under benches, tables, bike racks, trash receptacles, etc.
- _____ o. Where mowing strips or underlayments are not used, features are movable to allow ready access and minimize maintenance and herbicide use.
- _____ p. Turf strips between trees, roadways, walkways and planted areas are wide enough to accommodate mowing equipment used at the site. If not wide enough, the strips are replaced with vegetation or material that does not require mowing.
- _____ q. Mowing is eased by using wide angles, sweeping curves and straight lines in turf areas.
- _____ r. Bare gravel, brick or block walkways or parking areas are not used unless underlayment, geo-textiles or other means are used to avoid regular herbicide applications.
- _____ s. Uncontaminated rainwater from impervious areas is collected in a rain barrel and used for irrigation or appropriately redirected to a retention/rain garden/bioswale area. Contaminated rainwater with phytotoxic materials such as petroleum products, de-icers, etc. follows state guidelines for pollution reduction.
- _____ t. All irrigation specifications include at least two water-saving elements of drip, rain shut-off switches, moisture sensors, timing (not midday), separate zones for turf and non-turf areas, etc.
- _____ u. To reduce irrigation and fertilization needs and increase habitat for pollinators, turf area does not exceed a maximum of 40% of the total landscaped area for 90% of design projects.
- _____ v. Designer educates installers and/or customers about IPM and/or organic features in the design verbally or in print, to improve public understanding of IPM and/or organic and help ensure IPM and/or organic features are properly installed and maintained.
- _____ w. Design landscaping features to eliminate safe havens for pests and rodents. For example, keep shrubs and other plants at least 18 inches from the building or fill that space with small stones or similar substrate.

Notes:

____ **SCORE TOTAL, PAGE 17**

F. INSTALLATION (Complete only if Service Provider offers installation services)**I. Required Practices**

A “pass” rating is required on each of the following. The auditor will write in the applicants rating and supplement his or her decision with notes, including describing where the service provider exceeds the minimum requirement or where a practice is not applicable.

- a. Landscape features are installed as per design specifications and local municipal requirements unless modifications are approved by the designer and/or customer.
 - b. Specifications that do not conform to an IPM and/or organic approach are identified, communicated to the designer and/or customer, and modified where possible.
 - c. Soil surfaces are stabilized to minimize erosion and compaction during and after installation, and barriers (e.g., silt fences) are used to prevent soil entry into drainage systems or surface water bodies.
 - d. Soils are tested and amended as needed to meet requirements of plant material prior to installation.
 - e. Plants are inspected before installation and only used if healthy and free of pest problems that might require pesticide treatment after installation.
 - f. Plants are installed properly, i.e., turfgrass planting area is loosened and aerated, plant is set at the proper depth, and a set of watering parameters is provided in writing to the customer (i.e. water when temperature, sunlight and/or soil moisture meets certain conditions).
 - g. Wood products treated with chromium copper arsenate (CCA) are not used.
- IN PROGRESS.**
- h. Existing plants are adequately protected via fencing, grade changes and hydraulic changes.

Notes:

F. INSTALLATION (continued)**II. Scored Practices**

Service provider must earn at least 80% on the scorecard (page 34). The evaluator will score each of the following items as poor (score as 0), needs improvement (score as 1), satisfactory (score as 2), exceptional (score as 3) or not applicable (NA). Explain any unsatisfactory or non-applicable scores or exceptional performance.

Bonus items add to but do not detract from the score. Where appropriate, address unsatisfactory scores in the list of planned improvements (page 35).

If geotextiles are not used, score a-d as not applicable (NA).

- _____ a. Soil surface is smoothed and sharp objects removed before installation of geotextiles to prevent punctures.
- _____ b. Cover geo-textiles with mulch or other materials adequate to prevent UV breakdown (*i.e.* two to four inches).
- _____ c. Geotextile perimeter edges are staked or trenched (three to four inches) to prevent exposure and damage. The stakes do not contain toxic metals or wood treated with products that meet the “Least-Toxic Pesticides” guidelines on Page 23.
- _____ d. Concrete features have proper sub-surface preparation, are sufficiently deep and reinforced with adequate expansion joints to prevent cracking and weed encroachment for the design-life of the feature.

Notes:

_____ **SCORE TOTAL, PAGE 20**

G. MAINTENANCE (Complete only if Service Provider offers maintenance)**I. Required Practices**

A “pass” rating is required on each of the following. The evaluator will write in the applicants rating and supplement his or her decision with notes, including describing where the service provider exceeds the minimum requirement or where a practice is not applicable.

1.0 Monitoring and Inspection

- IN PROGRESS** a. Service provider interviews new customers to determine level of tolerance to pest and weed problems.
- IN PROGRESS** b. Service provider performs a thorough inspection of new customer sites to identify conditions conducive to pest, weed and disease problems (*e.g.*, design defects, maintenance issues).
- IN PROGRESS** c. Service provider develops a maintenance plan specific to the site, which includes identification of non-chemical methods for addressing pests and weeds prior to any chemical applications.
- IN PROGRESS** d. Service provider re-inspects virtually or in-person on a yearly basis or as needed.
- IN PROGRESS** e. Pest, weed and disease problems that exceed tolerance thresholds are accurately identified (*e.g.*, pest species, extent of infestation, noxious plants).
- IN PROGRESS** f. Conditions conducive to pests and existing pest problems are identified and recommendations are made verbally and in writing within an inspection report to the customer.

Notes:

G. MAINTENANCE**I. Required Practices (continued)**

2.0 Least-toxic pesticides as a last resort

- a. Pesticides are applied only after a pest problem has been verified and accurately identified, and non-chemical solutions are not adequate to meet performance expectations. No applications of pre-emergent herbicides that fail to pass all criteria on page 23.
- b. Pesticides are not applied on a routine or regularly scheduled basis regardless of conditions (i.e., weekly, monthly applications are not made).
- c. Pesticides are not broadcast over an entire landscape feature except for a limited number of applications per site associated with complete renovation (no more than 2 per season) or broadcast insecticide bait applications for fire ants.
- d. Service provider has copies of the pesticide label and SDS for any material(s) used and make available to customers.
- e. The chemical products used and their potential ecological and health risks are communicated to customers by providing labels and SDS prior to first application of the product.

Notes:

G. MAINTENANCE

I. Required Practices

2.0 Least-toxic pesticides (continued)

- e. No synthetic pesticides labeled “Danger” or “Warning” are used. If a pesticide is used that is exempt from registration by US EPA, it does not exceed criteria for “Danger” or “Warning,” i.e., acute oral, dermal or inhalation toxicity; skin or eye sensitivity.*
- f. No pesticides classified as possible, known, probable or likely carcinogens by US EPA, the International Agency for Research on Cancer or the California Proposition 65 List are used *
- g. No pesticides classified as reproductive toxicants according to the US EPA or the California Proposition 65 List are used.*
- h. No pesticides classified as a known, probable or suspected endocrine disruptor according to US EPA or EU are used.*
- i. Nerve toxicants (e.g., cholinesterase inhibitors) are not used.*
- j. Pesticides with label precautionary statements including “toxic” or “extremely toxic” to bees, birds, fish or wildlife are not used, unless these organisms are the target pest.
- k. Pesticides may not include ingredients with moderate or high mobility in soil, according to the Groundwater Ubiquity Score (GUS), or with a soil half-life of 31 days or more (except for mineral products).*
- l. Synthetic fertilizer use is limited to addressing immediate needs identified through soil testing.
- m. Products containing both fertilizer and herbicide (*i.e.*, “Weed-and-feed” products) are not used.
- n. No second-generation (“single feed”) rodenticide is used.

* For help in evaluating pesticides used, contact the IPM Institute. An exceptional resource we use frequently is located at www.pesticideinfo.org. Entering the pesticide product name or EPA registration number produces a report including ratings for a variety of risk factors. Our Midwest Grows Green Lawn and Land Forum, also, lists organic and reduced risk weed and pest control products for landscapes at bit.ly/MGGcontrol.

Notes for page 23:

G. Maintenance

I. Required Practices

2.0 Exceptions to the Least-Toxic Pesticides Minimum Requirements

GSC will certify companies and services that use synthetic pesticides at a very limited basis and with extreme discretion. GSC recognized companies and services will meet the following minimum requirements if using synthetic pesticides:

- o. Synthetic pesticide applications occur only in the following circumstances after all other IPM techniques have been exhausted:
 - Spot-treatment control of invasive weeds.
 - Broadcast treatment to kill existing vegetation that cannot adequately keep invasive or non-invasive weeds at acceptable levels (e.g. to replace rough bluegrass with Kentucky Bluegrass or fescues, to kill invasive/non-native species to replant with natives)
 - Spot-treatment control of hard-to-manage weeds or pests in high priority zones.
- p. The certified company or service develops a plan to avoid synthetic pesticide use in the future after an application and provides to the customer.
- q. 10% or less of customers or acres managed by the company or service receive a synthetic pesticide application. Whichever amount is less pesticides applied.
- r. Company shares the justification for the use of synthetic pesticides including strategy to mitigate future use with GSC.

G. MAINTENANCE**I. Required Practices**

3.0 Pesticide safety

- a. Used pesticide containers are properly disposed based on local, state and federal guidelines and regulations.
- b. Pesticides are stored only in original containers.
- c. Proper personal protective equipment (*e.g.*, respirators, gloves, etc.) is available, in good condition and used according to the pesticide label by handlers and applicators.
- d. Pesticide mixing facilities are adequate to contain spillage and prevent backflow.
- e. Pesticide emergency response equipment (*e.g.*, eyewash station, spill response kit, emergency shower) is adequate for the pesticides used by the Service Provider.
- f. A written emergency response plan is in place.
- g. Pesticide storage at the business location and on company vehicles is tightly controlled (*e.g.*, locked) to prevent unauthorized access, with adequate signage to alert emergency responders.
- h. Pesticide drift is kept to an absolute minimum by timing and/or method of application.
- i. Pesticide applications are consistent with the Application Exclusion Zone (AEZ) of the U.S. federal Worker Protection Standard. Applications are suspended any time there is a non-applicator person within 100 feet of the application regardless of application method.

Notes:

G. MAINTENANCE (continued)**II. Scored Practices**

Service provider must earn at least 80% on the scorecard (page 34). The evaluator will score each of the following items as poor (score as 0), needs improvement (score as 1), satisfactory (score as 2), exceptional (score as 3) or not applicable (NA). Explain any unsatisfactory or non-applicable scores or exceptional performance.

Bonus items add to but do not detract from the score. Where appropriate, address unsatisfactory scores in the list of planned improvements (page 35).

1.0 Pest Prevention and Avoidance

- _____ a. Plants are grown in natural form minimizing maintenance time and costs, and potential for injury to plants.
- _____ b. Pruning tools are disinfected between cuts or between plants if a disease that can be transmitted through pruning cuts is possible (e.g., fire blight of apple, crabapple and pear).
- _____ c. Soil amendments and fertilizers are applied only as needed to boost plant health and resistance to pests. E.g., indicated by testing or accurately identifying symptoms of a deficiency, and not by calendar.

Use synthetic fertilizers only during times of plant uptake and not when heavy rain is expected.
- _____ d. Fertilizer formulations are selected to minimize leaching and runoff, e.g., Use organic and natural materials (e.g., compost, grass clippings, OMRI listed fertilizers) to the greatest extent possible. Avoid slow release fertilizers packaged in microplastics.
- _____ e. Fertilizer applications are not made within 25 feet of a waterway.
- _____ f. Mowing heights are appropriate to preserve soil moisture, suppress weed germination and encourage a deep root system. Above 2 ½ inches for athletic turfgrass fields and three inches for non-athletic turfgrass fields.
- _____ g. Turf clippings remain on lawn.
- _____ h. Thick turf is maintained through overseeding and aeration to suppress weed growth. Excessive thatch can be removed if greater than ½ inch.
- _____ i. All irrigation practices and/or recommendations include strategies to maintain healthy plants without runoff; e.g., infrequent, deep watering; checking soil moisture before watering; etc.
- _____ j. Soil is tested when service is initiated and again at the beginning of each planting season or when changing application schedule.
- _____ k. BONUS: Plant debris is mulched or composted and used on-site.

-
- ___ l. BONUS: If irrigation systems are used, they are subsurface or low-volume irrigation.
 - ___ m. BONUS: Turf is top-dressed with compost twice annually. After soil pH and nutrients are balanced, application may be made once per year or compost tea may be used.
 - ___ n. BONUS: Only use organic and natural materials (e.g. compost, grass clippings, OMRI listed fertilizers, wood mulch etc.) for fertilization and soil amending (see page 29)
 - ___ o. BONUS: Only use organic and natural materials (e.g. cedar oils, vinegar, steam, OMRI listed pesticides, etc.) for pest, weed, fungi and disease control (see page 29).

Notes:

___ **SCORE TOTAL, PAGES 27-28**

G. MAINTENANCE**II. Scored Practices (continued)**

2.0 Cultural and Mechanical Practices

- ___ a. When a pest problem is identified, affected plants or plant parts are removed and replaced where feasible, e.g., when permitted by the client.
- ___ b. When conditions conducive to pest problems are found, the condition is corrected, such as re-locating an improperly placed plant or correcting compaction by aeration.
- ___ c. Weeds are managed through barriers, cultivation, mechanical controls (e.g. steam, foam, raking, mowing) or hand-pulling where feasible.
- ___ d. Mulch is replenished as needed to maintain a 2 to 3-inch depth.
- ___ e. BONUS: Two-stroke, gas powered engines are not used for mowing, leaf blowing, etc.
- ___ f. BONUS: Training and protocols specify that soil is not worked when wet to avoid compaction.

Notes:

___ **SCORE TOTAL, PAGE 29**

G. MAINTENANCE**II. Scored Practices (continued)**

3.0 Planning, Evaluation and Record-keeping

- _____ a. Landscapes are divided into priority areas or zones, with greater tolerance for pest populations and damage in less visible, less frequently used areas (see bit.ly/MGGprioritization).
- _____ b. A Pesticide Application Log is used to track all applications of pesticides (including least-toxic pesticides). It includes the targeted pest; date, time, and location of application; the specific pesticide applied; quantity used; the name of the person responsible; and the date and form of occupant notification procedures. Retain copies of all notices posted at the client site. Complete, legible records are maintained for at least three years.
- _____ c. Service Provider offers a sample Pest Sightings/Damage Log to its clients that includes information such as date, time, location, a description of the pest or pest damage, any action taken, and the name of the person reporting. This log may be part of a general maintenance reporting system.
- _____ d. Written correspondence between the customer and the business, including complaints and service requests, is kept for at least three years for each account.
- _____ e. **Bonus:** Service provider tracks customer feedback through comment cards, surveys or other devices.

Notes:

_____ **SCORE TOTAL, PAGE 30**

H. REQUIRED PRACTICES for GSC ORGANIC**Only complete this section if service provider pursues this distinction.**

Organic pesticides, fertilizers and amendments used by the service or service provider must be produced and handled without the use of:

- PASS IN PROGRESS.** Synthetic substances and ingredients, except as provided in Code of Federal Regulations [205.601](#) or [205.603](#).
- PASS IN PROGRESS.** Nonsynthetic substances prohibited in Code of Federal Regulations [205.602](#) or [205.604](#).
- PASS IN PROGRESS.** Nonagricultural substances used in or on processed products, except as otherwise provided in Code of Federal Regulations [205.605](#).
- PASS IN PROGRESS.** Nonorganic agricultural substances used in or on processed products, except as otherwise provided in Code of Federal Regulations [205.606](#).
- PASS IN PROGRESS.** Excluded methods, except for vaccines: *Provided*, that, the vaccines are approved in accordance with Code of Federal Regulations [205.600\(a\)](#).
- PASS IN PROGRESS.** Ionizing radiation, as described in Food and Drug Administration regulation, [21 CFR 179.26](#).
- PASS IN PROGRESS.** Sewage sludge.

Notes:

J. EVALUATION CHECKLIST

The auditor must visually inspect the following items to verify compliance. Check the following or indicate as not applicable (NA). Page numbers in brackets refer to page(s) where item is referenced.

- ___ a. Business license. [4]
- ___ b. Pesticide applicator's licenses/certificates for principals and lead staff. [4, 6]
- ___ c. Employee Right-to-Know posting. [6]
- ___ d. Sample pesticide application posting notice. [6]
- ___ e. Pesticide application records. Spot check from application records for past year. Verify that all pesticide products are listed on page 22 and that applications are made only after verified, accurately diagnosed pest problems. [6, 16, 21, 22]
- ___ f. Liability insurance policy records. [7]
- ___ g. Policy regarding protection of human and environmental health. [8]
- ___ h. Training plan. [9]
- ___ i. Training records. [9]
- ___ j. Reference publications. [9]
- ___ k. SDS sheets for pesticide products used. [16]
- ___ l. Pesticide labels for products used. [16]
- ___ m. Pesticide storage facility (ies). [18] Verify all items in stock are listed on page 22.
- ___ n. Company vehicles (spot check one to several vehicles). [18] Verify all pesticide products stored on vehicles are listed on page 32.
- ___ o. Customer account records. Spot check at least five customer files for compliance with required and scored practices. Check customer feedback file if a separate file exists.
- ___ p. Customer accounts. Spot check at least one commercial account, on-site, for compliance with required and scored practices. If Service Provider does not service commercial accounts, spot check at least two residential accounts.

Notes:

K. IPM/Sustainable/Organic SCORECARD

Enter points earned for each scored section:

	Column 1: Total Points Earned	Column 2: Number of Non-Bonus Items Scored as Not Applicable
Page 12:		
Page 13:		
Page 16:		
Page 18:		
Page 20:		
Page 28:		
Page 29:		
Page 30:		
Subtotal:	A.	B.
Total Non-Bonus Points Available:		C. 165
Adjusted Points Available (Subtract Sub-total B from C):		D.
Percent score (divide sub-total A by D):		

Scoring Key:

All minimum requirements scored as “Pass” plus 80% to 100% on scorecard = GREEN SHIELD CERTIFIED. Pending final approval by the IPM Institute, service provider may promote and offer all of its services (GREEN SHIELD CERTIFIED Service Provider) or its designated and evaluated service (GREEN SHIELD CERTIFIED Service, see page 7) as GREEN SHIELD CERTIFIED to its customers.

All minimum requirements scored as “Pass” including the minimum requirements detailed on page 26 plus 80% to 100% on scorecard = GREEN SHIELD CERTIFIED ORGANIC.

Failing score on any minimum requirement or <80% on scorecard = IPM in Progress. To offer GREEN SHIELD CERTIFIED Services, service provider must correct any failed requirements and implement additional IPM practices listed in the required improvements section to raise their score above 79%. Required improvements will be addressed in the evaluation report provided by the IPM Institute.

Additional evaluation notes (attach additional pages as needed):

L. Planned Improvements

List IPM/organic/plant health program improvement(s) planned by the service provider over the next one to three years. (At least one improvement is required. Use additional pages or attach a separate word processor document if necessary.)

M. Evaluator Statement

I evaluated the service provided by _____ (business name) on the ____ day of _____ (month), 20____ (year).

The business achieved the score noted above.

Evaluator Signature: _____ Print Name: _____

Address: _____

City, State, Zip: _____

Phone: (____) _____ E-mail: _____

Attachments:

- Service Providers IPM Service Contract (required)
- Service Provider written IPM policy (recommended)
- Other, e.g., employee list, pesticide product list, additional notes, etc., describe:

Additional evaluator notes (if any):

N. Service Provider Statement

The information provided for this evaluation is accurate and complete. If approved, I (we) agree to deliver certified services only in accordance to the practice standards in this evaluation.

I (we) agree that the certification period is for one year only and must be renewed annually by submitting the GREEN SHIELD CERTIFIED annual update form and certification fee. An announced, scheduled on-site renewal evaluation is required every three years by an IPM Institute-approved evaluator.

Access to facilities and records must be made available for evaluation at any time during the certification period with reasonable notice. Certification may be revoked at any time. Certification standards are subject to change at the sole discretion of the IPM Institute.

I (we) understand that GREEN SHIELD CERTIFICATION is not transferable in the event of change of ownership. I (we) agree to inform the IPM Institute within 30 days in the event of any change in our designated contact person for the program, bankruptcy or revocation or suspension of business licenses or certifications.

I (we) agree to provide all GREEN SHIELD CERTIFIED customers with a written statement explaining the GREEN SHIELD CERTIFIED program and options for providing feedback directly to the IPM Institute, using text provided by the IPM Institute.

I (we) understand that performing landscape management services involves a certain degree of risk that could result in injury, death or loss or damage to person or property. After carefully considering the risk involved, and in view of the fact that the IPM Institute of North America, Inc. is a not-for-profit organization, I (we) hereby release, hold-harmless and waive all claims associated with this activity which may be made against me (us) or that I (we) may have against the IPM Institute of North America, Inc., its employees, officers, directors, agents, volunteers and members. I (we) furthermore agree to name the IPM Institute of North America, Inc. as an additional insured on our liability insurance policy.

Authorized Representative(s):

Name: _____

Name: _____

Title: _____

Title: _____

Signature: _____

Signature: _____

Date: _____

Date: _____

Mailing address: _____

City, State, Zip: _____

Phone: (____) _____

E- mail: _____

Designated GREEN SHIELD CERTIFIED contact if different from above:

Name: _____

Title: _____

Phone: (____) _____

E- mail: _____

Additional evaluator notes or service provider comments, if any (attach additional pages as needed):

O. References and Resources

You are encouraged to use the following which influenced the development of GREEN SHIELD CERTIFIED:

Ard, J. 1999. Fundamentals of a Low Maintenance, IPM Approach to Landscape Design. <http://www.efn.org/~ipmpa/des-cnsd.html>

Bio-Integral Resource Center, 2003. Directory of Least-Toxic Pest Control Products. *The IPM Practitioner* 24: (11/12) 1-52. List of least-toxic controls by target pest, including insect, plant disease, weed and vertebrate pests; list of Service Providers with contact information. Available from BIRC, PO Box 7414, Berkeley, CA 94707. (510) 524-2567, FAX (510) 524-1758, E-mail birc@igc.org

Bobbitt, V.M., A.L. Antonelli, C.R. Foss, R.M. Davidson, R.S. Byther, R.R. Maleike. 2002. *Pacific Northwest Landscape IPM Manual*, 3rd Ed. Washington State University Cooperative Extension Publication MISC0201. Phone 800 723-1763.

Byther, R.S., C.R. Foss, A.L. Antonelli, R.R. Maleike and V.M. Bobbitt. 2000. *Landscape Plant Problems: A Pictorial Diagnostic Manual*, 2nd Ed. Washington State University Cooperative Extension Publication MISC0194. Phone 800 723-1763.

Dreistadt et al. 1994. Pests of Landscape Trees and Shrubs. 328 pp. University of California Division of Agriculture and Natural Resources Publication No. 3359. ISBN 1-879906-18-X. Color photos, line drawings, identification, biology, monitoring, management. ANR Publications, 6701 San Pablo Ave., Oakland CA 94608-1239. Phone (510) 642-2431, FAX (510) 643-5470.

Flint, M.L., ed., 2000. Pests of Home and Landscape. University of California Statewide IPM Project. Color images, description, biology and management. <http://www.ipm.ucdavis.edu/PMG/selectnewpest.home.html>

Florida Exotic Plant Council. 1999. List of Florida's Most Invasive Species. <http://www.fleppc.org/99list.htm>

Green, T.A., ed., 2003. *IPM Standards for Schools*, 3rd Edition. 147 pp. Comprehensive guide to IPM practices and resources for schools and other sensitive environments. Available at <http://www.ipminstitute.org/school.htm>

Massachusetts Invasive Plant Working Group. 2003. The Evaluation of Non-Native Plant Species for Invasiveness in Massachusetts. http://www.newfs.org/conserve/docs/evaluation_for_invasiveness1.pdf

Merchant, M.E., J.P. Krause, J.A. McAfee and J.A. Hurley. 2003. Landscape IPM. Module 6: Video and Video Users Guide. Agricultural Communications, Texas A&M University Cooperative Extension, Bryan, Texas 77806, (888) 900-2577, <http://texaserc.tamu.edu>.

National IPM Network. 2002. IPM Priorities for Nursery Production & Landscape Maintenance. <http://northeastipm.org/reports/phaseone/raupp/components>

Pollution Prevention Outreach Team. 2004. Environmentally Responsible Landscaping. <http://www.ecobiz.com>

Tomchik, L. 2003. How to Choose a Landscaping Company. Natural Choice Directory. <http://www.naturalchoice.net/articles/landscaping.htm>

University of Kentucky. IPM for Public Landscapes. <http://www.uky.edu/Ag/IPM/sponsprj/landscap/ipmbroch.htm>

University of Massachusetts. 2001. Plant Culture and Maintenance. http://www.umassgreeninfo.org/fact_sheets/plantculture.html



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