



ATLANTA AREA AQUARIUM ASSOCIATION:

HORTICULTURIST'S AWARD POINTS PROGRAM GUIDE



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PROGRAM SUMMARY

The Horticulturist's Award Program (HAP) is established to recognize the accomplishments of AAAA members, to promote members' involvement in the successful cultivation and propagation of aquatic plants, to gather and share information on the growth and reproduction of aquatic plants, and to provide a wide range of aquatic plants to the membership during auctions. The program is non-competitive in that no one wins or loses. Each person moves at their own pace toward the award goal of their choice.

Only aquatic plants are eligible for this program. An aquatic plant is defined as a plant that can live and grow submerged in water for a period of more than one year. Floating plants are also considered eligible if they need not take root in any substrate. We do not accept plants that do not normally spend a significant fraction of their life cycle fully submerged and we reserve the right to reject entries that fail to meet this condition.

WHAT DO I NEED TO DO TO SUBMIT PLANTS?

In order to obtain points for aquatic plants, a member must bring in the following for each species, based upon the method of vegetative reproduction the species underwent.

1. Floating plants: A doubling of the original amount of plant material is necessary to receive credit for reproducing floating plants (a loose "handful" of additional material for larger species, and half that amount for smaller plants such as duckweed shall be the minimum requirement).
2. Bunch plants: Rootless cuttings (stems) must be a minimum of 6 inches long. If stems with roots are submitted for HAP approval, the non-rooted portion must be twice as long as the rooted portion; with a minimum length of 5 inches from the base to the tip of the stem. Roots do not count toward the length of the submittal. Minimum of 5 "stems".
2. By Runner or Division: At least three individual plants, with at least 4 leaves apiece, capable of living independently of the parent plant must be submitted for each species that reproduces by runner. In the case of genera that normally have fewer than four leaves per plant such as *Glossostigma* and *Marsilea*, 15 individual plants must be submitted to obtain credit. Of these, at least 5 must be connected on the same runner and all must have viable roots at each node/plant. For genera such as *Cryptocoryne* that spread both by stolon and rhizome budding a plug with at least 3 individual plantlets, each with an independent root system may be submitted for credit. Credit will only be given once per species for asexual reproduction regardless of method.
3. Ferns and plants that reproduce by rhizome division must be free of the parent plant, must be at least three inches long, and have roots or rhizoids at least ½ inch long present on the cutting.
4. Sexual reproduction: Plants reproduced sexually must be large enough to identify as the



same as the parent plant. They must be reproduced by sexual means from an aquarist's own parent plant. The HAP participant may not obtain seeds from another person to grow out and turn in to receive credit for reproducing the plant sexually. In many cases a species of plant is not self-fertile and may require the pollen from a different plant to germinate. In such cases it is permissible to obtain pollen from another individual's plant in order to successfully fertilize the plant in question. In this case both individuals will be allowed to submit separate plants for HAP credit.

A series of photos logging the development of the fruiting body, seeds, the germinated seedlings, and cultivation of the seedlings must accompany each entry in this category. If no log, or an incomplete log, is submitted with the plants, credit will be awarded for having reproduced the plant asexually. If the individual has already received credit for asexual propagation of the species no credit for propagation will be given. If a photo of the flower is submitted credit will also be given for having flowered the plant, as per the guidelines for flowers. Credit for sexual propagation of a species will be awarded in addition to credit awarded for vegetative reproduction and successfully flowering a plant.

5. Propagation by seed points will be awarded in addition to points awarded for flowering.
6. Points for flowering of plants may be awarded for either submergent or emergent specimens. Verification via photograph must be done when the plant is in full bloom and the flower is attached to the member's own plant in their aquarium or pond. Submittal of a physical specimen at an AAAA meeting is encouraged. In such cases the flower must be clearly discernable and attached to enough of the plant to easily discern the species. Alternatively, a video of the plant and the flower may be submitted to the HAP committee. Points equal to the successful vegetative propagation of the species will be awarded for flowering a plant in addition to credit for successfully propagating the plant (sexually or asexually). For example, successfully flowering *Hygrophila difformis* will award 5 points (Class A plant) in addition to a potential 5 points for asexual propagation of the species; for a potential total of 10 points.
7. Regrowth of a seasonal plant does not count as propagation, it is simply classified as new growth. (Examples are the Aponogeton species)

To be recognized for propagation, a HAP form must be completed and submitted to the HAP chairperson; the plant or plants must be donated to the HAP auction; and the plant must be bagged and labeled with the species name and method of reproduction. Additional points may be earned by doing one or all of the following:

1. A written article on the propagation of the species, submitted for publication in the newsletter. An additional five points can be earned when an article is written on a plant species and submitted to the HAP Program at the time of the plant submission. Articles must be approximately 250 to 400 words. Articles must describe the maintenance and propagation of the plant. Articles must be readable, informative and publishable in the newsletter. These articles will be kept in our reference library and will also be published in our Association Newsletter. The addition of photographs to be submitted with the article is



encouraged. The pictures should be in focus, and should be substantially composed of the plant.

2. A five to fifteen minute oral presentation on the propagation of the species. At least one month's prior notification to the HAP chair is required before an oral presentation can be scheduled. An additional five points can be earned for each presentation.

The member must complete all the required information on the HAP Data Sheet. Point classification of plants reproduced (5, 10, 15, or higher) is determined according to level of difficulty for breeding and/or cultivation of plant. Points are awarded only once for each species submitted by a member.



HAP DATA SHEET

Member Name:		Phone number:	
Plant Name: Scientific:			
Common:			
Ref. Source Used for I.D.:			Page:

Type of Reproduction: _____

Describe the aquarium/pond, contents, equipment, lighting type and duration, water conditions and other living creatures in the aquarium/pond.

State the water changing frequency and type of replacement water used:

Were snails present? _____ Type? _____

Was an alga present on the plants? _____ Color(s)? _____

Did you treat your fish with medication while the plants were in the aquarium/pond? _____

What medications? _____

Describe any problems resulting from this medication:

Participants Signature _____ Date _____

HAP Committee Use Only:			
Date Received:		Points Awarded:	
Article Received?		Points Awarded:	



A plaque is awarded at the following point levels:

Aquatic Horticulturist Award (100 points required from any combination of Classes)

Advanced Aquatic Horticulturist (200 points)

- A minimum of 30 points must be from class C or class D
- One article on plants

Superior Aquatic Horticulturist (350 points)

- 8 species from class B, C or D
- Must have at least 2 class C, 2 class D and 1 class E
- One additional article on plants

Expert Aquatic Horticulturist (600 points)

- 15 species from class B, C or D
- Must have at least 2 class E and 1 class F
- One additional article on plants

Master Aquatic Horticulturist (900 points)

- Must have at least 3 class F
- 2 additional articles
- 1 Club presentation

Grand Master Aquatic Horticulturist (1200 points)

- Must have at least 4 class E, and 4 class F
- 3 additional articles
- 2 club presentations or 2 photo essays (5 photos with at least 500 words)

Note that members and the Atlanta Area Aquarium Association benefit financially when they submit HAP plants for the auction. Members receive 70% of any auction proceeds while the association garners 30% to offset club expenses.



HAP PROGRAM GUIDELINES

1. Points are awarded only once for any species per member. In other words, many different members can submit the same species, however, one single member cannot submit one species more than once. For example, the one time presentation of *Ceratophyllum demersum* would be awarded 5 points.
2. Any plant not included in the HAP Point Qualification lists will be assigned points by the HAP committee on request. The point value for propagating any plant can be re-evaluated at any participant's request by the HAP Committee.
3. Following a successful propagation, it is the propagators own responsibility to see that his points have been properly recorded.
4. In the event of any confusion in the identification of a plant, reference to a published photograph must be made for each member of that plant species to get credit for that species. In the event no published photograph exists, a color photograph shall be taken and filed with the HAP Data Sheet. In the event of a disagreement as to the identity of the plant reproduced, the decision of the HAP Committee shall be final regarding the awarding of points.
5. Suggestions, Questions, and Concerns can be directed to the HAP e-mail address: or the HAP Chairman and escalated to the Atlanta Area Aquarium Association Board of Directors as appropriate. We want this to be the best program for all involved. Please let us know your thoughts.
6. A member may petition the HAP Committee in order to submit a lower number of propagated plants when it is known that a particular species is more difficult to propagate.

The definitive reference for the Atlanta Area Aquarium Association Horticulturist's Award Program will be Aquarium Plants written by Christel Kasselmann. Publisher: Krieger Publishing Company; 1 edition (October 1, 2002), ISBN-10: 1575240912, ISBN-13: 978-1575240916. Appropriate references for US native species and foreign species not found in Aquarium Plants will be used at the discretion of the HAP committee.



Class A (5 points)

Ammania senegalensis
Azolaceae caroliniana
Azolaceae filiculoides
Azolaceae nilocita
Azolaceae pinnata

Ceratophyllum sp.

Ceratophyllum demersum
 (Hornwort)
Ceratophyllum siliquosa
Ceratophyllum submersum
 (Tropical Hornwort)
Ceratophyllum thalictroides (Water Sprite)

Ceratopteris sp.

Ceratopteris cornuta
Ceratopteris froesii
Ceratopteris pteroides (Water Sprite)
Ceratopteris siliquosa
Ceratopteris thalictroides (Indian Fern)

Crassula aquatica
Crassula helmsii

Egeria densa
Egeria najas (Slender Leafed Elodea)

Eichornia azurea
Eichornia crassipes (Water Hyacinth)
Eichornia diversifolia

Eichornia natans

Elodea sp.

Elodea densa (Anacharis)
Elodea canadensis (Canadian Elodea)

Elodea nutalli
Hippurus vulgaris

Hygrophila sp.

Hygrophila augustifolia
Hygrophila balsamica
Hygrophila corymbosa (Temple Plant)

Hygrophila difformis (Water Wisteria)

Hygrophila guianensis

Hygrophila lacustris

Hygrophila lancea

Hygrophila longifolia

Hygrophila polysperma

Hygrophila salicifolia

Hygrophila stricta

Hygrophila violacea

Lemna sp.

Lemna gibba
Lemna spirodela (great duck weed)
Lemna trisulca

Lemna minor (Duckweed)

Prosperpinaca palustris

***Riccia fluitans* (Crystalwort)**

Salvinia sp.

Salvinia auriculata (butterfly fern)

Salvinia cucullata

Salvinia minima

Salvinia natans

Salvinia rotundifolia

Salvinia sprucei

Spirodela polyrhiza

Subularia aquatica

Synnema triflorum

Utricularia sp.

Utricularia exoleta

Utricularia gibba

Utricularia minor

Utricularia neglecta

Utricularia vulgaris (bladderwort)

Vallisneria sp.

Vallisneria americana (Corkscrew Val)

Vallisneria asiatica

Vallisneria gigantea (Giant Val)

Vallisneria gracilis

Vallisneria natans (Eel Grass)

Vallisneria neotropicalis

Vallisneria portugalensis

Vallisneria spiralis

Vallisneria tortifolia

Vesicularia dubyana (Java Moss)

***Wolffia arrhiza* (Dwarf Duckweed)**



Class B: 10 Points

Acorus sp.

Acorus calamus
Acorus gramineus
Acorus pusillus
Acorus variegatus

Alternanthera sp.

Alternanthera lilacina
Alternanthera philoeroides
Alternanthera reineckii
Alternanthera roseifolia
Alternanthera sessilis
Alternanthera violette

Bacopa sp.

Bacopa amplexicaulis
Bacopa caroliniana
Bacopa crenata
Bacopa floribunda
Bacopa lanigera
Bacopa monnieri
Bacopa myriophylloides
Bacopa rotundifolia
Bacopa variegatus
Brasneria schreberi

Cabomba sp.

Cabomba aquatica
Cabomba australis
Cabomba caroliniana
Cabomba piauhyensis
Cabomba pulcherrima

Cardamine sp.

Cardamine lyrata
Cardamine rotundifolia
Cardamine variabilis
Crassula sp.

Crassula bonariensis

Crassula helmsii

Crassula recurva

Crassula vaillanti

Crinum thianum

Eleocharis sp.

Eleocharis acicularis (Hairgrass)

Eleocharis minima

Fontinalis sp.

Fontinalis antipyretica

Hemianthus micranthemoides

Heteranthera sp.

Heteranthera dubia
Heteranthera reniformis
Heteranthera zosterifolia
 (Stargrass)

Hydrilla verticillata

Hydrocharis marsuranae

Hydrocleys nymphoides

Hydrocotyle sp.

Hydrocotyle leucocephala
 (Brazilian Pennywort)
Hydrocotyle martima
Hydrocotyle verticillata
Hydrocotyle vulgaris (Umbrella Plant)

Iris pseudacorus

Lilaeopsis novae-zelandiae

Limnobium laevigatum

(Amazon Frogbit)

Limnophila sp.

Limnophila australis
Limnophila aquatica
Limnophila aromatica
Limnophila glabra
Limnophila heterophylla
Limnophila indica
Limnophila sessiliflora (Ambulia)

Lobelia sp.

Lobelia cardinalis

Lobelia splendens

Ludwigia sp.

Ludwigia abscondens

Ludwigia alternifolia

Ludwigia arcuata

Ludwigia brevipes

Ludwigia glandulosa

Ludwigia mullertii

Ludwigia palustris

Ludwigia repens

Myosotis scorpi

Myriophyllum sp.

Myriophyllum alterniflorum

Myriophyllum aquaticum

(Brazilian Milfoil)

Myriophyllum brasiliense (Parrot

Feather)

Myriophyllum heterophyllum

Myriophyllum hippuroides (Red

Milfoil)

Myriophyllum matogrossense

Myriophyllum scabratum

(Foxtail)

Myriophyllum spicatum (Milfoil)

Myriophyllum ussuriense

Myriophyllum verticillatum

Najas sp.

Najas graminea

Najas guadelupensis

Najas indica

Najas microdon

Nelumbo lutea

Nelumbo nucifera

Nitella flexilis (Stonewort)

Nomaphila augustifolia

Nomaphila stricta

Nymphoides sp.

Nymphoides aquatica (Banana Plant)

Nymphoides humboldtiana

Nymphoides indica

Nymphoides peltata

Nymphoides sp. 'Taiwan'

Potamogeton sp.

Potamogeton crispus

Potamogeton gayi

Potamogeton gramineus

Potamogeton malaianus

Potamogeton mascarensis

Potamogeton natans

Potamogeton oxyphyllum

Potamogeton perfoliatus

Rotala sp.

Rotala indica

Rotala macracantha

Rotala rotundifolia

Rotala wallachii

Sagittaria sp.

Sagittaria cuneata

Sagittaria graminea

Sagittaria lancifolia

Sagittaria montevidensis

(Arrowhead Sag)

Sagittaria platyphylla

Sagittaria pusilla

Sagittaria sagittifolia

Sagittaria subulata

Sagittaria weitherbiana

Samolus sp.

Samolus parvifloris (Water

Cabbage)

Samolus valerandii

Saururus cernuus

Stratiotes aloides

Telanthera lilacina

Thalia

Typha latifolia

Utricularia exoleta

Utricularia vulgaris



Class C: 15 Points

Aglaonema simplex

Anubias sp.

- Anubias azfelli*
- Anubias barteri* (all varieties)
- Anubias coffeefolia*
- Anubias congensis*
- Anubias gillettii*
- Anubias glabra*
- Anubias gracilis*
- Anubias hastifolia*
- Anubias heterophylla*
- Anubias lanceolata*
- Anubias nana*

Aponogeton sp. (all species except those listed in Class D)

Bolbitis sp.

- Bolbitis heteroclita*
- Bolbitis heudelottii*

Crinum sp.

- Crinum calamistratum*
- Crinum natans*
- crinum purpurascens*

Cryptocoryne sp.

- Cryptocoryne affinis*
- Cryptocoryne albida*
- Cryptocoryne aponogetifolia*
- Cryptocoryne auriculata*
- Cryptocoryne axelrodii*
- Cryptocoryne balansae*
- Cryptocoryne beckettii*
- Cryptocoryne blassii*
- Cryptocoryne bogneri*
- Cryptocoryne bullosa*
- Cryptocoryne ciliata*
- Cryptocoryne cordata*
- Cryptocoryne costata*
- Cryptocoryne crispata*
- Cryptocoryne diderici*
- Cryptocoryne evae*
- Cryptocoryne ferruginea*
- Cryptocoryne fusca*
- Cryptocoryne gracilis*
- Cryptocoryne griffithii*
- Cryptocoryne hejnyi*
- Cryptocoryne johorensis*
- Cryptocoryne korthausae*
- Cryptocoryne legroi*
- Cryptocoryne lingua*
- Cryptocoryne longicauda*
- Cryptocoryne lucens*
- Cryptocoryne lutea*
- Cryptocoryne minima*
- Cryptocoryne moehlmannii*
- Cryptocoryne nevillei*

Cryptocoryne nurii

- Cryptocoryne parva*
- Cryptocoryne petchii*
- Cryptocoryne pontederifolia*
- Cryptocoryne purpurea*
- Cryptocoryne retrospiralis*
- Cryptocoryne sarawacensis*
- Cryptocoryne schulzei*
- Cryptocoryne siamensis*
- Cryptocoryne spiralis*
- Cryptocoryne sulphurea*
- Cryptocoryne thwaitesii*
- Cryptocoryne tonkinensis*
- Cryptocoryne undulata*
- Cryptocoryne usteriana*
- Cryptocoryne versteegii*
- Cryptocoryne walkeri*
- Cryptocoryne wendtii*
- Cryptocoryne willisii*
- Cryptocoryne zewaldiae*
- Cryptocoryne zonata*
- Cryptocoryne zukalii*

Cyperus sp.

- Cyperus alternifolius*
- Cyperus papyrus*

Didiplis diandra (Water Hedge)

Echinodorus sp.

- Echinodorus acicularis*
- Echinodorus amazonicus*
- Echinodorus amphibius*
- Echinodorus angustifolius*
- Echinodorus argentinensis*
- Echinodorus aschersonianus*
- Echinodorus augustifolius*
- Echinodorus austroamericanus*
- Echinodorus barthii*
- Echinodorus berteroi*
- Echinodorus bleheri*
- Echinodorus bolivianus*
- Echinodorus cordifolius*
- Echinodorus grandiflorus*
- Echinodorus grisebachii*
- Echinodorus horemanii*
- Echinodorus horizontalis*
- Echinodorus inpai*
- Echinodorus intermedius*
- Echinodorus isthmicus*
- Echinodorus latifolius*
- Echinodorus longiscapus*
- Echinodorus macrophyllus*
- Echinodorus magdalensis*
- Echinodorus major* or *maior*
- Echinodorus muricatus*
- Echinodorus nympphaefolius*

Echinodorus opacus

- Echinodorus osiris*
- Echinodorus palaefolius*
- Echinodorus paniculatus*
- Echinodorus parviflorus*
- Echinodorus pellucidus*
- Echinodorus portoalegrensis*
- Echinodorus quadricostatus*
- Echinodorus rigidifolius*
- Echinodorus scaber*
- Echinodorus schlueteri*
- Echinodorus subulatus*
- Echinodorus tenellus*
- Echinodorus uruguayensis*

Eichhornia sp.

- Eichhornia azurea*
- Eichhornia crassipes*

Eusteralis sp.

Gymnocoronis spilanthoides

Hemianthus callichroides

- Hottonia inflata*
- Hottonia palustris*

Isoetes sp.

- Isoetes echinosperma*
- Isoetes flaccida*
- Isoetes lacustris*
- Isoetes malinverniana*
- Isoetes setacea*
- Isoetes velata*

Marsilea sp.

- Marsilea brownii* (Four Leaf Water Clover)
- Marsilea crenata*
- Marsilea quadrifolia*

Microsorium pteropus

Nymphaea sp.

- Nymphaea alba*
- Nymphaea colorata*
- Nymphaea chromatella*
- Nymphaea lotus*
- Nymphaea maculata*
- Nymphaea masaniello*
- Nymphaea pubescens*
- Nymphaea stellata*
- Nymphaea tetragona*
- Nymphaea sp.* 'Rose Arey'
- Nymphaea zenkeri*

Pistia stratiotes (water chestnut)

Trapa sp.

- Trapa japonica*
- Trapa natans* (Water Chestnut)



Class D: 20 Points

Aldrovanda sp.

Aponogeton sp.

Aponogeton abyssinicus
Aponogeton bernieranus
Aponogeton boivianus
Aponogeton capuroni
Aponogeton crispus
Aponogeton distachyos
Aponogeton echinatus
Aponogeton elongatus
Aponogeton fenestrails
Aponogeton guillotii
Aponogeton henkelianus
Aponogeton longplumulosus
Aponogeton lorlae
Aponogeton madagascariensis
(Madagascar Lace)

Aponogeton monostrachyus

Aponogeton natans

Aponogeton rigidifolius

Aponogeton stachyosporus

Aponogeton ulvaceus

Aponogeton undulatus

Barclaya longifolia

Bolbitis fluviatilis

Bolbitis huedelotti

Bolbitis hydrophylla

Blyxa echinosperma

Blyxa japonica

Blyxa longifolis

Lagenandra sp.

Lagenandra dalzellii

Lagenandra koenigii

Lagenandra lancifolia

Lagenandra meeboldii

Lagenandra ovata

Lagenandra thwaitesii

Nuphar sp.

Nuphar japonica

Nuphar luteum (Spatterdock)

Nuphar pumila

Nuphar sagittifolium

Ottelia sp.

Ottelia alismoides

Ottelia kunenensis

Ottelia muricata

Ottelia ulvifolia

Spiranthes cernua



Class E - Flowering

• *Extra points and recognition will be awarded for all verified flowerings of aquatic plants. The additional points will be the same as those resulting from the propagation of the plant according to classes A to D.*

Class F - Reproduction From Seed or Spores

• *Extra points and recognition will be awarded for all verified reproductions from seed or spores. The additional points will be the same as those resulting from the propagation of the plant according to classes A to D.*



PROGRAM NOTES:

- ★ The Atlanta Area Aquarium Association will be adding this formal HAP Program to the program that is currently in place. Each year those three breeders who have submitted the most HAP plants into the auction will be given awards based on their contribution on an annual basis.
- ★ Also, our hope is that plants will now be checked in, assigned a number, and then placed on a viewing table. This will allow members and visitors to view the plants before the meeting, during the breaks, and prior to the auction.
- ★ HAP submissions will be posted each month in the Newsletter along with the current standings of our HAP program.
- ★ The HAP committee may alter any of the program regulations in order to maintain the quality of the program, in keeping with its objectives.
- ★ Your suggestions and participation are always welcome. If you can help check plants in at the meeting or set up the viewing table, help is ALWAYS appreciated.