

## Weed Data: Detailed HNIS Info

Monday, December 29, 1997

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This questionnaire is designed to gather specific information regarding weeds which are currently or potentially present in the state of Hawaii.

Your name: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

Other: Phone (voice): \_\_\_\_\_ fax: \_\_\_\_\_ e-mail: \_\_\_\_\_

Date you completed this questionnaire: \_\_\_\_\_

Your comments (use back of page if necessary; please indicate if back of page is used) :

### Return questionnaire to :

Bob Teytaud  
c/o Hawaiian Ecosystems at Risk project  
St. John Bldg., Room 409  
CPSU/Dept. of Botany  
University of Hawaii  
3190 Maile Way  
Honolulu, HI 96822  
  
teytaud@hawaii.edu

### Refer questions to :

Philip Thomas  
c/o NBS/HALE  
P.O Box 369  
Makawao, Maui, HI 96768  
  
e-mail: thomasp@maui.com (best contact method)  
voice (808) 572-9306 ext. 5938  
fax (808) 572-1304 (be sure to send to "Attn. Philip Thomas / Research")

### Instructions :

For each species, please answer all questions about which you have particular knowledge.

Your answers will be entered into a database. Therefore, unless the list of are preceded by "e.g.", please choose ONLY from the options in parentheses (or) following the question. Include additional information in a corresponding (or general/misc) "notes" area. (If you feel that a category should be ADDED to the database, please indicate this by entering "see notes RE: [...]" as the answer to the specific question, then indicate in the corresponding note the new option you think should be added, and why.)

For any questions that require more space than is provided for a thorough answer, please answer on the back of the sheet and/or a separate piece of paper. In this case, PLEASE BE SURE TO INDICATE THE QUESTION NUMBER TO WHICH THE ANSWER APPLIES.

**\*\*IMPORTANT\*\*** Please write all answers in NARRATIVE FORM, RESTATING the question in the answer, e.g. for "What color giraffes are in your preserve?" the answer shouldn't be "red, green, blue"; rather, the appropriate response would be "The Nature Conservancy's Sulawesi Giraffe Preserve is home to red, green, and blue giraffes." (Think in terms of the responses to the questionnaire being presented as a publication in order WITHOUT the questions being interspersed.)

#1. Can population expand with MODERATE frequency of canopy-level site disturbance?

YES NO

Ref: WEEDMODL.DB:Pop expan w MOD cdstb frq

#2. Can population expand with LOW frequency of canopy-level site disturbance?

YES NO

Ref: WEEDMODL.DB:Pop expan w LO cdstb frq

#3. Can population expand with NO canopy-level site disturbance?

YES NO

Ref: WEEDMODL.DB:Pop expan w NO cdstb

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#4. Can this species survive a high frequency of fires?  
YES NO

Ref: WEEDMODL.DB:Fire HI frequency surviv

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#5. Can this species survive a moderate frequency of fires?  
YES NO

Ref: WEEDMODL.DB:Fire MOD frequency surviv

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#6. Can this species survive a low frequency of fires?  
YES NO

Ref: WEEDMODL.DB:Fire LO frequency surviv

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#7. Can this species survive high-intensity fires?  
YES NO

Ref: WEEDMODL.DB:Fire HI intensity surviv

---

#8. Can this species survive moderate-intensity fires?  
YES NO

Ref: WEEDMODL.DB:Fire MOD intensity surviv

---

#9. Can this species survive low-intensity fires?  
YES NO

Ref: WEEDMODL.DB:Fire LO intensity surviv

---

#10. Does fire stimulate reproduction of this species?  
YES NO

Ref: WEEDMODL.DB:Fire-stimulated repro

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#11. Does fire stimulate growth of this species?  
YES NO

Ref: WEEDMODL.DB:Fire-stimulated growth

---

#12. Is ALLELOPATHY an important community impact of this species?  
YES NO

Ref: WEEDMODL.DB:Impt impact: allelopathy

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#13. Is fire REQUIRED for reproduction of this species?  
YES NO

Ref: WEEDMODL.DB:Fire required for repro

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#14. Are there OTHER important community impacts of this species? (Itemize in next question.)  
YES NO

Ref: WEEDMODL.DB:Impt impact: other

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#15. Is SHADING (of other species) an important community impact of this species?  
YES NO

Ref: WEEDMODL.DB:Impt impact: shading

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#16. Is COMPETITION FOR SPACE an important community impact of this species?  
YES NO

Ref: WEEDMODL.DB:Impt impact: compet4space

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#17. List any OTHER important impacts of this species in Hawaii.

Ref: WEEDMODL.DB:List other impt impacts

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#18. Are there OTHER important modes of reproduction of this species in Hawaii? (Itemize in next question.)  
YES NO

Ref: WEEDMODL.DB:Impt repro in HI: other

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#19. Is the effect of this species on NUTRIENT/MATERIALS CYCLING an important impact? (Itemize nutrient cycling impacts in next question.)  
YES NO

Ref: WEEDMODL.DB:Impt impact: nutrient cyc

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#20. List NUTRIENT/MATERIALS CYCLE impacts of this species in Hawaii (e.g. nitrogen fixation, changes in water budget).

Ref: WEEDMODL.DB>List nutrient cyc impacts

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#21. Is the effect of this species on ENERGY FLOW an important impact? (Itemize energy flow impacts in next question.)  
YES NO

Ref: WEEDMODL.DB:Impt impact: E+ flow

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#22. List ENERGY FLOW impacts of this species in Hawaii (e.g. changes in food/biomass available to sustain other ecosystem components).

Ref: WEEDMODL.DB>List E+ flow impacts

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#23. Is VEGETATIVE REPRODUCTION an important mode of reproduction of this species in Hawaii?  
YES NO

Ref: WEEDMODL.DB:Impt repro in HI: veg

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#24. Is VEGETATIVE REPRODUCTION an important mode of reproduction of this species elsewhere (outside Hawaii)?  
YES NO

Ref: WEEDMODL.DB:Impt repro nonHI: veg

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#25. Are SEEDS an important mode of reproduction of this species in Hawaii?  
YES NO

Ref: WEEDMODL.DB:Impt repro in HI: seed

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#26. Are SEEDS an important mode of reproduction of this species elsewhere (outside Hawaii)?  
YES NO

Ref: WEEDMODL.DB:Impt repro nonHI: seed

---

#27. Are SPORES an important mode of reproduction of this species in Hawaii?  
YES NO

Ref: WEEDMODL.DB:Impt repro in HI: spore

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#28. Are SPORES an important mode of reproduction of this species elsewhere (outside Hawaii)?  
YES NO

Ref: WEEDMODL.DB:Impt repro nonHI: spore

---

#29. Is this species dispersed by water (i.e. floating propagules or transported in streams) in Hawaii?  
YES NO

Ref: WEEDMODL.DB:Dispers in HI by water

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#30. Are there OTHER important modes of reproduction of this species elsewhere (outside Hawaii)? (Itemize in next question.)  
YES NO

Ref: WEEDMODL.DB:Impt repro nonHI: other

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#31. List OTHER important modes of reproduction of this species (also, WHERE are they important [e.g. what countries]).

Ref: WEEDMODL.DB>List other repro/where

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#32. Is this species dispersed by wind in Hawaii?

YES NO

Ref: WEEDMODL.DB:Dispers in HI by wind

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#33. Is this species dispersed by mammals (other than humans) in Hawaii?

YES NO

Ref: WEEDMODL.DB:Dispers in HI by mammal

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#34. Is this species dispersed by birds in Hawaii?

YES NO

Ref: WEEDMODL.DB:Dispers in HI by birds

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#35. SPECIES: \_\_\_\_\_

Ref: WEEDMODL.DB:Taxon code

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#36. Are there OTHER important mechanisms by which this species is dispersed in Hawaii (itemize in next question)?

YES NO

Ref: WEEDMODL.DB:Dispers in HI by other

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#37. List OTHER important dispersal mechanisms of this species in Hawaii.

Ref: WEEDMODL.DB:List HI dispersal details

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#38. Is the typical seed/spore viability of this species between one and five years (inclusive)?

YES NO

Ref: WEEDMODL.DB:Seed/spore viable 1-5yr

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#39. Is the typical seed/spore viability of this species less than one year?

YES NO

Ref: WEEDMODL.DB:Seed/spore viable <1yr

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#40. Is the average time from propagule establishment to first reproduction from two to five years (inclusive)?

YES NO

Ref: WEEDMODL.DB:Repro lead time HI 2-5yr

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#41. Is the typical seed/spore viability of this species between six and twenty years (inclusive)?

YES NO

Ref: WEEDMODL.DB:Seed/spore viable 6-20yr

---

#42. Is the typical seed/spore viability of this species greater than 20 years?

YES NO

Ref: WEEDMODL.DB:Seed/spore viable >20yr

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#43. Is the average time from propagule establishment to first reproduction under two years?

YES NO

Ref: WEEDMODL.DB:Repro lead time HI <2yr

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#44. Is the average time from propagule establishment to first reproduction over five years (inclusive)?

YES NO

Ref: WEEDMODL.DB:Repro lead time HI >5yr

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#45. Is this species usually HERBACEOUS (i.e. non-woody) in Hawaii?

YES NO

Ref: WEEDMODL.DB:Us form in HI: herb

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#46. Is this species usually WOODY (i.e. non-herbaceous) in Hawaii?

YES NO

Ref: WEEDMODL.DB:Us form in HI: woody

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#47. Is the typical mature height of this plant in Hawaii 0.5-5m?

YES NO

Ref: WEEDMODL.DB:Us ht HI: 0.5-5m

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#48. Is the typical mature height of this plant in Hawaii <0.5m?

YES NO

Ref: WEEDMODL.DB:Us ht HI: <0.5m

---

#49. Can/does this species become a dominant species (i.e. high proportion of cover) in the canopy of (any) plant communities in Hawaii?

YES NO

Ref: WEEDMODL.DB:Poten canopy dom in HI

---

#50. Is the typical mature height of this plant in Hawaii >5m?

YES NO

Ref: WEEDMODL.DB:Us ht HI: >5m

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#51. Is this plant typically a VINE in Hawaii?

YES NO

Ref: WEEDMODL.DB:Vine?

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#52. Does this species form vines which reach and/or obscure the canopy (or other top/highest layer of vegetation) in areas where it grows?

YES NO

Ref: WEEDMODL.DB:Canopy vine?

---

#53. Does this species exhibit coppicing (vegetative regrowth from stumps)?

YES NO

Ref: WEEDMODL.DB:Coppicing?

---

#54. Can/does this species become a dominant species (i.e. high proportion of cover) in the subcanopy of (any) plant communities in Hawaii?

YES NO

Ref: WEEDMODL.DB:Poten subcanopy dom in HI

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#55. Can/does this species germinate epiphytically in Hawaii?

YES NO

Ref: WEEDMODL.DB:Epiphytic germination HI

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#56. Can/do this species' seeds/spores germinate in xeric (dry) conditions?

YES NO

Ref: WEEDMODL.DB:Germinates in dry conds

---

#57. Is the typical average number of propagules produced per mature plant per year HIGH (vs. "low")?

YES NO

Ref: WEEDMODL.DB:Repro potential HI: HI

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#58. Can/do this species' seeds/spores germinate in low light conditions?

YES NO

Ref: WEEDMODL.DB:Germinates in low light

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#59. Can this species TOLERATE high light intensities (during some or all of its life cycle)?

YES NO

Ref: WEEDMODL.DB:Tolerates high light int

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#60. Does this species REQUIRE low light intensities (during some or all of its life cycle)?

YES NO

Ref: WEEDMODL.DB:Requires low light int

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#61. Can this species TOLERATE low light intensities (during some or all of its life cycle)?

YES NO

Ref: WEEDMODL.DB:Tolerates low light int

---

#62. Does this species REQUIRE high light intensities (during some or all of its life cycle)?

YES NO

Ref: WEEDMODL.DB:Requires high light int

---

#63. Can this species survive in mesic (moist) conditions?

YES NO

Ref: WEEDMODL.DB:Survives mesic

---

#64. Can this species survive in xeric (dry) conditions?

YES NO

Ref: WEEDMODL.DB:Survives xeric

---

#65. Can this species survive in hydric (wet) conditions?

YES NO

Ref: WEEDMODL.DB:Survives hydric

---

#66. Can/does this species reproduce in xeric (dry) conditions?

YES NO

Ref: WEEDMODL.DB:Repro xeric

---

#67. Can/does this species reproduce in mesic (moist) conditions?

YES NO

Ref: WEEDMODL.DB:Repro mesic

---

#68. Can/does this species reproduce in hydric (wet) conditions?

YES NO

Ref: WEEDMODL.DB:Repro hydric

---

#69. Can propagules of this species become established with NO ground-level site disturbance (not necessarily resulting in reproducing populations)?

YES NO

Ref: WEEDMODL.DB:Estd w NO gdstb

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#70. Can propagules of this species become established with NO canopy-level site disturbance (not necessarily resulting in reproducing populations)?

YES NO

Ref: WEEDMODL.DB:Estd w NO cdstb

---

#71. Can population expand with HI frequency of ground-level site disturbance?

YES NO

Ref: WEEDMODL.DB:Pop expan w HI gdstb frq

---

#72. Can population expand with MODERATE frequency of ground-level site disturbance?

YES NO

Ref: WEEDMODL.DB:Pop expan w MOD gdstb frq

---

#73. Can population expand with LOW frequency of ground-level site disturbance?

YES NO

Ref: WEEDMODL.DB:Pop expan w LO gdstb frq

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#74. Is this species dispersed by humans in Hawaii?  
YES NO

Ref: WEEDMODL.DB:Dispers in HI by human

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#75. Can population expand with NO ground-level site disturbance?  
YES NO

Ref: WEEDMODL.DB:Pop expan w NO gdstb

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#76. Can population expand with HI frequency of canopy-level site disturbance?  
YES NO

Ref: WEEDMODL.DB:Pop expan w HI cdstb frq

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**Please record any additional comments (RE: questionnaire format, etc.) in the "Your comments" section on the first page of this questionnaire. Thanks!**

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