School IPM Inside and Out
Outdoor Pest and Site Management Assessment

Note to Community IPM Team members:
This Assessment Tool includes questions relevant for measuring and assessing site and pest management practices throughout the school grounds. The goal of the assessment is measure the reality of current practices prior to implementation of the SIPMI&O program, and then post.

Sections of this questionnaire may be relevant to different individuals at the school sites as well as to different specialists on our team. The goal is, over the first few visits to each site, to have completed as much of the questionnaire as possible by conducting brief interviews with the appropriate personnel while touring the school grounds. Record what people say, but also record the reality of what you see on the ground. For the purpose of the site assessment, direct observation trumps responses from school personnel where the two are in conflict.

Section 1: General Questions Applicable to All Outdoor Areas

1A. Site layout

1. Is there a current map or blueprint of the site?
   ____ Yes (1)
   ____ We have a map, but it is out of date (.5)
   ____ No (0)

2. Are the types of trees, shrubs, bedding plants and turf identified, labeled or marked on a map?
   ____ Yes (1)
   ____ No (0)

3. Are various landscapes prioritized as high priority maintenance versus lesser priority maintenance?
   ____ Yes (1)
   ____ No (0)

Comments / Notes (optional):

1B. Soil

4. Are soil types known for the site?
   ____ Yes (1)
   ____ No (0)

5. What soil tests are conducted? (1 point each)
   ____ Soil texture How often? _____
   ____ Soil nutrients How often? _____
   ____ pH How often? _____
   ____ Alkalinity How often? _____
   ____ Electrical conductivity (EC) How often? _____

6. Are soils tested for drainage?
   ____ Yes (1)
   ____ No (0)

7. Are there any drainage problems on the grounds as shown by prolonged standing water?
   ____ Yes (0)
   ____ No (1)

Comments / Notes (optional):

1C. Irrigation

8. Is there a current map of irrigation pipes?
   ____ Yes (1)
   ____ No (0)

9. Is there a current map of irrigation zones?
   ____ Yes (1)
   ____ No (0)

10. Is all the irrigation automated with irrigation controllers?
    ____ Yes (1)
    ____ No (0)

11. Is any irrigation done manually?
    ____ Yes (1)
    ____ No (0)

12. What is the quality of the irrigation water?
    ____ Potable (1)
    ____ Reclaimed (.5)
    ____ Gray Water (0)

13. What are pH and electrical conductivity (EC) of irrigation water?
    pH _____
    EC _____

14. What type of irrigation systems are used for which types of plants?
    Overhead for _____
    Drip system for _____
    Spray stakes for _____
    Bubblers for _____
    Manual irrigation with hose for _____
    _____

15. What criteria are used to determine irrigation frequency and duration? (Check all that apply)
    ____ AZMET (1)

____ Weather Forecast (1)
____ Seasonal Schedule (.5)
____ Fixed Schedule (0)
____ Other (please specify):

16. How often is the irrigation system checked for uniformity, pressure, emitter output and coverage?
    ____ Weekly (1.5)
    ____ Monthly (1)
    ____ 6 Months (.75)
    ____ Yearly (.5)
    ____ Other (please specify):

17. Is an irrigation audit conducted regularly on the turf irrigation system?
    ____ Yes (1)
    ____ No (0)

18. How often are irrigation controllers adjusted?
    ____ Seasonal (1)
    ____ Fixed Schedule (0)
    ____ Other (please specify):

Comments / Notes (optional):

Section 2: Turf

General Questions

19. Which of the following types of turf sites do school personnel manage? (Check all that apply)
    ____ Landscape turf……**If checked complete part 2A starting on p.6**
    ____ Playgrounds……**If checked complete part 2B starting on p.12**
    ____ Athletic fields……..**If checked complete part 2C starting on p.18**

20. Are different types of turf managed the same or are they managed according to their use? (landscape turf, playground turf, athletic turf)
    ____ Managed the same (0)
    ____ Managed differently (1)

Section 2A. Landscape Turf

General Management

21. What types of turfgrass are grown?

22. What is the mowing height?

23. How often is the turf mowed?

24. Is the turf aerified?
    ____ Yes (1)
    ____ No (0)

25. If so, how often and when?

26. Is the turf de-thatched (verticut)?
    ____ Yes (1)
    ____ No (0)

27. If so, how often and when?

28. Is overseeding done for a winter turf?
    ____ Yes (1)
    ____ No (0)

Comments / Notes (optional):

Fertility

29. Are soils or plant tissues tested for nutrient content before fertilizing? If so, how often?
    ____ Yes, prior to each fertilization (1)
    ____ Yes, sometimes, but not prior to each fertilization (.5)
    ____ No (00
30. What is the schedule for fertilizing?

31. What types of fertilizer are used?

32. How much fertilizer is applied each time?

33. What type of fertilizer application equipment is used?

34. How often is the fertilizer application equipment calibrated?
    ____ Prior to each use (1)
    ____ Daily (1)
    ____ Weekly (.5)
    ____ Monthly (0)
    ____ Yearly (0)
    ____ Never (0)

35. Are delivery amounts, speeds, and volumes known for each setting on application equipment?
    ____ Yes (1)
    ____ No (0)

Comments / Notes (optional):

Pest Management

36. Which of the following cultural issues pose a problem in your turf? (Check all that apply)
    ____ Uneven irrigation
    ____ Poor drainage
    ____ Compaction
    ____ Holes / uneven surface area
    ____ Other (please specify)

37. Which of the following pests pose a problem? (Check all that apply.)

    ____ Weeds (please specify which weeds and where they occur):

____ Insect pests (please specify which insects and where they occur):

____ Diseases (please specify which diseases and where they occur):

____ Vertebrate pests (please specify which vertebrates and where they occur):

38. Are management areas regularly monitored / inspected to identify any existing pest problems?
    ____ Yes (1)
    ____ No (0)
    If yes, how often?

39. Are any cultural practices done with the intent of discouraging or preventing pest, disease, or weed problems?
    ____ Yes (1)
    ____ No (0)

40. If so, which ones? (1 point per relevant practice used)

41. Are pests identified prior to implementation of any pest control strategy?
    _____ Always (1)
    _____ Most of the time (.75)
    _____ Sometimes (.5)
    _____ Rarely (.25)
    _____ Never (0)

42. What non-chemical and reduced-hazard pest control methods are used? (1 point each)
    ____ Conservation of natural enemies / beneficial insects (if yes, which beneficial insects have been observed?):

    ____ Application of nematodes or other biological insecticides (please specify):

____ Application of selective, reduced-hazard pesticides that help preserve natural enemies
____ Hand pulling / physical removal of weeds
____ Other (please specify):

43. Are pesticides, other than herbicides, used on turf?
____ Yes
____ No

44. If yes, are these pesticides used only in the infested area?
____ Yes (1)
____ No (0)

45. If pesticides are used, are they only used when the pest or disease problem is observed, or are they used preventatively?
____ Observed (1)
____ Preventative (0)

46. Are pre-emergence herbicides used?
____ Yes
____ No

47. If yes, which weeds are they controlling?

48. When are they applied?

49. Are post-emergence herbicides used?
____ Yes
____ No

50. Which weeds are they controlling?

51. When are they applied?

52. How are pests and weeds controlled along fence lines?

53. Are insecticides used to control insect pests?

____ Yes
____ No

54. If so, which ones?

55. Are fungicides used to control plant diseases?
____ Yes
____ No

56. If so, which ones?

57. Are reduced-hazard pesticides used for controlling weeds, insects, and diseases?
____ Yes (1)
____ No (0)

58. If yes, which ones?

59. Are pesticide and herbicide application equipment calibrated before use?
____ Yes (1)
____ No (0)

60. Are nozzles checked to be the same size and not worn?
____ Yes (1)
____ No (0)

61. Are hoses, valves, and gauges checked so they don't leak?
____ Yes (1)
____ No (0)

62. How often is the spray equipment calibrated?
____ Prior to each use (1)
____ Daily (1)
____ Weekly (.5)
____ Monthly (0)
____ Yearly (0)
____ Never (0)

63. How are vertebrate pests controlled?

64. Which of the following records are kept?
    ____ Records of pest monitoring and occurrence (1)
    ____ Equipment maintenance records (sprayer calibration, etc) (1)
    ____ Pesticide application records (1)
    ____ Other (please specify)

65. May we have access to relevant records, including pesticide application records, for the purpose of assessing the progress of the School IPM Inside and Outside program?
    ____ Yes
    ____ No
    Contact Person(s):

Comments / Notes (optional):

Section 2B. Playground Turf

General Management

66. What types of turfgrass are grown?

67. What is the mowing height?

68. How often is the turf mowed?

69. Is the turf aerified?
    ____ Yes (1)
    ____ No (0)

70. If so, how often and when?

71. Is the turf de-thatched (verticut)?
    ____ Yes (1)
    ____ No (0)

72. If so, how often and when?

73. Is overseeding done for a winter turf?
    ____ Yes (1)
    ____ No (0)

Comments / Notes (optional):

Fertility

74. Are soils or plant tissues tested for nutrient content before fertilizing? If so, how often?

____ Yes, prior to each fertilization (1)
____ Yes, sometimes, but not prior to each fertilization (.5)
____ No (0)

75. What is the schedule for fertilizing?

76. What types of fertilizer are used?

77. How much fertilizer is applied each time?

78. What type of fertilizer application equipment is used?

79. How often is the fertilizer application equipment calibrated?
    ____ Prior to each use (1)
    ____ Daily (1)
    ____ Weekly (.5)
    ____ Monthly (0)
    ____ Yearly (0)
    ____ Never (0)

80. Are delivery amounts, speeds, and volumes known for each setting on application equipment?
    ____ Yes (1)
    ____ No (0)

Comments / Notes (optional):

Pest Management

81. Which of the following cultural issues pose a problem in your turf? (Check all that apply)
    ____ Uneven irrigation
    ____ Poor drainage

____ Compaction
____ Holes / uneven surface area
____ Other (please specify)

82. Which of the following pests pose a problem? (Check all that apply.)

____ Weeds (please specify which weeds and where they occur):

____ Insect pests (please specify which insects and where they occur):

____ Diseases (please specify which diseases and where they occur):

____ Vertebrate pests (please specify which vertebrates and where they occur):

83. Are management areas regularly monitored / inspected to identify any existing pest problems?
____ Yes (1)
____ No (0)
If yes, how often?

84. Are any cultural practices done with the intent of discouraging or preventing pest, disease, or weed problems?
____ Yes (1)
____ No (0)

85. If so, which ones? (1 point per relevant practice used)

86. Are pests identified prior to implementation of any pest control strategy?
    _____ Always (1)
    _____ Most of the time (.75)
    _____ Sometimes (.5)
    _____ Rarely (.25)
    _____ Never (0)

87. What non-chemical and reduced-hazard pest control methods are used? (1 point each)
    ____ Conservation of natural enemies / beneficial insects (if yes, which beneficial insects have been observed?):

    ____ Application of nematodes or other biological insecticides (please specify):

    ____ Application of selective, reduced-hazard pesticides that help preserve natural enemies
    ____ Hand pulling / physical removal of weeds
    ____ Other (please specify):

88. Are pesticides, other than herbicides, used on turf?
    ____ Yes
    ____ No

89. If yes, are these pesticides used only in the infested area?
    ____ Yes (1)
    ____ No (0)

90. If pesticides are used, are they only used when the pest or disease problem is observed, or are they used preventatively?
    ____ Observed (1)
    ____ Preventative (0)

91. Are pre-emergence herbicides used?
    ____ Yes
    ____ No

92. If yes, which weeds are they controlling?

93. When are they applied?

94. Are post-emergence herbicides used?
    ____ Yes
    ____ No

95. Which weeds are they controlling?

96. When are they applied?

97. How are pests and weeds controlled along fence lines?

98. Are insecticides used to control insect pests?
____ Yes
____ No

99. If so, which ones?

100. Are fungicides used to control plant diseases?
____ Yes
____ No

101. If so, which ones?

102. Are reduced-hazard pesticides used for controlling weeds, insects, and diseases?
____ Yes (1)
____ No (0)

103. If yes, which ones?

104. Are pesticide and herbicide application equipment calibrated before use?
____ Yes (1)
____ No (0)

105. Are nozzles checked to be the same size and not worn?
____ Yes (1)
____ No (0)

106. Are hoses, valves, and gauges checked so they don't leak?
____ Yes (1)
____ No (0)

107. How often is the spray equipment calibrated?
____ Prior to each use (1)

____ Daily (1)
____ Weekly (.5)
____ Monthly (0)
____ Yearly (0)
____ Never (0)

108. How are vertebrate pests controlled?

109. Which of the following records are kept?
____ Records of pest monitoring and occurrence (1)
____ Equipment maintenance records (sprayer calibration, etc) (1)
____ Pesticide application records (1)
____ Other (please specify)

110. May we have access to relevant records, including pesticide application records for the purpose of assessing the progress of the School IPM Inside and Outside program?
____ Yes
____ No
Contact Person(s):

Comments / Notes (optional):

Section 2C. Athletic Fields

General Management

111. What types of turfgrass are grown?

112. What is the mowing height?

113. How often is the turf mowed?

114. Is the turf aerified?
____ Yes (1)
____ No (0)

115. If so, how often and when?

116. Is the turf de-thatched (verticut)?
____ Yes (1)
____ No (0)

117. If so, how often and when?

118. Is overseeding done for a winter turf?
____ Yes (1)
____ No (0)

Comments / Notes (optional):

Fertility

119. Are soils or plant tissues tested for nutrient content before fertilizing? If so, how often?
____ Yes, prior to each fertilization (1)
____ Yes, sometimes, but not prior to each fertilization (.5)
____ No (0)

120. What is the schedule for fertilizing?

121. What types of fertilizer are used?

122. How much fertilizer is applied each time?

123. What type of fertilizer application equipment is used?

124. How often is the fertilizer application equipment calibrated?
____ Prior to each use (1)
____ Daily (1)
____ Weekly (.5)
____ Monthly (0)
____ Yearly (0)
____ Never (0)

125. Are delivery amounts, speeds, and volumes known for each setting on application equipment?
____ Yes (1)
____ No (0)

Comments / Notes (optional):

Pest Management

126. Which of the following cultural issues pose a problem in your turf? (Check all that apply)

____ Uneven irrigation
____ Poor drainage
____ Compaction
____ Holes / uneven surface area
____ Other (please specify)

127. Which of the following pests pose a problem? (Check all that apply.)

____ Weeds (please specify which weeds and where they occur):

____ Insect pests (please specify which insects and where they occur):

____ Diseases (please specify which diseases and where they occur):

____ Vertebrate pests (please specify which vertebrates and where they occur):

128. Are management areas regularly monitored / inspected to identify any existing pest problems?
____ Yes (1)
____ No (0)
If yes, how often?

129. Are any cultural practices done with the intent of discouraging or preventing pest, disease, or weed problems?
____ Yes (1)
____ No (0)

130. If so, which ones? (1 point per relevant practice used)

131. Are pests identified prior to implementation of any pest control strategy?
_____ Always (1)
_____ Most of the time (.75)
_____ Sometimes (.5)
_____ Rarely (.25)
_____ Never (0)

132. What non-chemical and reduced-hazard pest control methods are used? (1 point each)
____ Conservation of natural enemies / beneficial insects (if yes, which beneficial insects have been observed?):

____ Application of nematodes or other biological insecticides (please specify):

____ Application of selective, reduced-hazard pesticides that help preserve natural enemies
____ Hand pulling / physical removal of weeds
____ Other (please specify):

133. Are pesticides, other than herbicides, used on turf?
____ Yes
____ No

134. If yes, are these pesticides used only in the infested area?
____ Yes (1)
____ No (0)

135. If pesticides are used, are they only used when the pest or disease problem is observed, or are they used preventatively?
____ Observed (1)
____ Preventative (0)

136. Are pre-emergence herbicides used?
____ Yes
____ No

137. If yes, which weeds are they controlling?

138. When are they applied?

139. Are post-emergence herbicides used?
____ Yes
____ No

140. Which weeds are they controlling?

141. When are they applied?

142. How are pests and weeds controlled along fence lines?

143. Are insecticides used to control insect pests?
____ Yes
____ No

144. If so, which ones?

145. Are fungicides used to control plant diseases?
____ Yes
____ No

146. If so, which ones?

147. Are reduced-hazard pesticides used for controlling weeds, insects, and diseases?
____ Yes (1)
____ No (0)

148. If yes, which ones?

149. Are pesticide and herbicide application equipment calibrated before use?
____ Yes (1)
____ No (0)

150. Are nozzles checked to be the same size and not worn?
____ Yes (1)
____ No (0)

151. Are hoses, valves, and gauges checked so they don't leak?
____ Yes (1)

____ No (0)

152. How often is the spray equipment calibrated?
____ Prior to each use (1)
____ Daily (1)
____ Weekly (.5)
____ Monthly (0)
____ Yearly (0)
____ Never (0)

153. How are vertebrate pests controlled?

154. Which of the following records are kept?
____ Records of pest monitoring and occurrence (1)
____ Equipment maintenance records (sprayer calibration, etc) (1)
____ Pesticide application records (1)
____ Other (please specify)

155. May we have access to relevant records, including pesticide application records for the purpose of assessing the progress of the School IPM Inside and Out program?
____ Yes
____ No
Contact Person(s):

Comments / Notes (optional):

Section 3: Landscape plants

General Information

156. What types of trees, shrubs and other plants are grown?

157. Is there a maintenance plan for landscape plants?
____ Yes (1)
____ No (0)

158. If yes, is it…
____ Seasonal
____ By calendar
____ Monthly
____ Other (please specifiy)

159. When were the majority of trees and shrubs established on the property?

160. Is there a replacement plan in case of plant failure?
____ Yes (1)
____ No (0)

161. If so, what is the plan?

162. Are current plants and new plants selected based on their adaptability to the climate, soil conditions, exposure, and function?
____ Yes (1)
____ No (0)

163. Is the size of current plants appropriate for the space allocated?
____ Yes (1)
____ No (0)

164. Are trees and shrubs pruned on a schedule or an as needed basis?
____ As needed (1)
____ Schedule (0)

165. Is a certified arborist consulted to examine trees periodically?
____ Yes (1)
____ No (0)

Fertility

166. Are soils or plant tissues tested for nutrient content before fertilizing? If so, how often?

____ Yes, prior to each fertilization (1)
____ Yes, sometimes, but not prior to each fertilization (.5)
____ No (0)

167. What is the schedule for fertilizing?

168. What types of fertilizer are used?

169. How much fertilizer is applied each time?

Comments / Notes (optional):

Pest Management

170. Which of the following cultural issues pose a problem in the landscape? (Check all that apply)
____ Improper irrigation
____ Nutrient management issues
____ Poor drainage
____ Poor soil
____ Other (please specify):

171. Which of the following pests pose a problem? (Check all that apply.)

____ Weeds (please specify which weeds and where they occur):

____ Insect pests (please specify which insects and where they occur):

____ Diseases (please specify which diseases and where they occur):

____ Vertebrate pests (please specify which vertebrates and where they occur):

172. Are management areas regularly monitored / inspected to identify any existing pest problems?
____ Yes (1)
____ No (0)
If yes, how often?

173. Are any cultural practices done with the intent of discouraging or preventing pest, disease, or weed problems?
____ Yes (1)
____ No (0)

174. If so, which ones? (1 point per relevant practice used)

175. Are pests identified prior to implementation of any pest control strategy?
_____ Always (1)
_____ Most of the time (.75)
_____ Sometimes (.5)
_____ Rarely (.25)
_____ Never (0)

176. What non-chemical and reduced-hazard pest control methods are used? (1 point each)
____ Conservation of natural enemies / beneficial insects (if yes, which beneficial insects have been observed?):

____ Application of nematodes or other biological insecticides (please specify):

____ Application of selective, reduced-hazard pesticides that help preserve natural enemies
____ Hand pulling / physical removal of weeds

____ Physical removal of pest
____ Other (please specify):

177. Are pesticides other than herbicides, used on trees and shrubs?
____ Yes
____ No

178. If yes, are these pesticides used only in the infested area?
____ Yes (1)
____ No (0)

179. If pesticides are used, are they only used when the pest or disease problem is observed, or are they used preventatively?
____ Observed (1)
____ Preventative (0)

180. Are pre-emergence herbicides used?
____ Yes
____ No

181. If yes, which weeds are they controlling?

182. When are they applied?

183. Are post-emergence herbicides used?
____ Yes
____ No

184. Which weeds are they controlling?

185. When are they applied?

186. Are insecticides used to control insect pests?
____ Yes
____ No

187. If so, which ones?

188. Are fungicides used to control plant diseases?
____ Yes
____ No

189. If so, which ones?

190. Are reduced-risk pesticides used for controlling weeds, insects, and diseases?
____ Yes (1)
____ No (0)

191. If yes, which ones?

192. How are vertebrate pests controlled?

193. Which of the following records are kept?
____ Records of pest monitoring and occurrence (1)
____ Equipment maintenance records (sprayer calibration, etc) (1)
____ Pesticide application records (1)
____ Other (please specify)

194. May we have access to relevant records, including pesticide application records for the purpose of assessing the progress of the School IPM Inside and Out program?
____ Yes
____ No

Contact Person(s):

Comments / Notes (optional):

Getting Students Involved

195. Are plants used as part of the curriculum?
____ Yes (1)
____ No (0)

196. Are vegetables or fruit trees grown as part of the curriculum?
____ Yes (1)
____ No (0)

197. Do students participate in the planting or maintenance of plants on campus?
____ Yes (1)
____ No (0)

Comments (optional):