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| Weed (Scientific name) | Bathurst burr [Xanthium species] | | |
| Region | Central West, Hawkesbury-Nepean, Lachlan | | |
| Management Area | Upper Macquarie County Council | | |
| Landuse | 3.2 Grazing modified | | |
| Assumptions | In accordance with instructions in <i>Weed Risk Management Instruction booklet</i> (Johnson, S, September 2009, Industry & Investment NSW). | | |
| <i>Invasiveness</i> | Score | Total | |
| Q1. What is the ability of the weed to establish amongst existing plants? | | 2.0 | Seedlings establish within open vegetation or weeds Q1 |
| Q2. What is the weed's tolerance to average weed management practices in the land use? | | 2.0 | Between 50 and 95% of weeds survive Q2 |
| Q3. What is the reproductive ability of the weed in the land use? | | 2.0 | |
| (a) Time to seeding | 2.0 | | 1 year or less Q3 |
| (b) Annual seed production | 2.0 | | High |
| (c) Vegetative reproduction | 0.0 | | None |
| Q4. How likely is long-distance dispersal (>100m) by natural means? | | 2.0 | |
| (a) Flying animals | 1.0 | | Occasional Q4 |
| (b) Other wild animals | 2.0 | | Common |
| (c) Water | 1.0 | | Occasional |
| (d) Wind | 0.0 | | Unlikely |
| Q5. How likely is long-distance dispersal (>100 m) by human means? | | 3.0 | |
| (a) Deliberate spread by people | 0.0 | | Unlikely Q5 |
| (b) Accidentally by people and vehicles | 2.0 | | Common |
| (c) Contaminated produce | 2.0 | | Common |
| (d) Domestic/farm animals | 2.0 | | Common |
| Total | | 7.3 | |

| Impacts | Score | Total | |
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| Q1. Does the weed reduce the establishment of desired plants? | | 2.0 | 10 - 50% reduction Q1 |
| Q2. Does the weed reduce the yield or amount of desired vegetation? | | 2.0 | 10 - 25% reduction Q2 |
| Q3. Does the weed reduce the quality of products, diversity or services available from the land use? | | 3.0 | High Q3 |
| Q4. What is the weed's potential to restrict the physical movement of people, animals, vehicles, machinery and/or water? | | 2.0 | Medium Q4 |
| Q5. What is the weed's potential to negatively affect the health of animals and/or people? | | 3.0 | High Q5 |
| Q6. Does the weed have major positive or negative effects on environmental health? | | 2.0 | Q6 |
| (a) food/shelter | 1.0 | | Major negative effect |
| (b) fire regime | 1.0 | | Major negative effect |
| (c) altered nutrient levels | 1.0 | | Major negative effect |
| (d) soil salinity | 0.0 | | Minor or no effect |
| (e) soil stability | 0.0 | | Minor or no effect |
| (f) soil water table | 0.0 | | Minor or no effect |
| Total | | 7.4 | |
| Potential Distribution | | | |
| Q1. Within the geographic area being considered, what is the percentage area of land use that is suitable for the weed? | | 8.0 | 60-80% of land use Q1 |
| Comparative weed risk score | | 432 | |
| Weed risk category | | Very high | |

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| <p>Control Costs</p> <p>Q1. How detectable is the weed? (a) Distinguishing features (b) Period of year shoot growth visible (c) Height at maturity (d) Pre-reproductive height in relation to other vegetation</p> <p>Q2. What is the general accessibility of known infestations at the optimum time of treatment?</p> <p>Q3. How expensive is management of the weed in the first year of targeted control? (a) Chemical costs/ha (b) Labour costs/ha (c) Equipment costs</p> <p>Q4. What is the likely level of participation from landholders/volunteers within the land use at risk?</p> <p style="text-align: right;">Total</p> | <p>Score</p> <p>0 1 1 1</p> <p>Total</p> <p>5.8</p> | <p>2</p> <p>always distinct 4-8 months 0.5 - 2 m similar height</p> <p>1 medium</p> <p>3 medium (\$100-\$249/ha) medium (\$100-\$249/ha) medium</p> <p>1.0 medium</p> | <p>Q1</p> <p>Q2</p> <p>Q3</p> <p>Q4</p> |
| <p>Persistence</p> <p>Q1. How effective are targeted management treatments applied to infestations of the weed?</p> <p>Q2. What is the minimum time period for reproduction of sexual or vegetative propagules?</p> <p>Q3. What is the maximum longevity of sexual or vegetative propagules?</p> <p>Q4. How likely are new propagules to continue to arrive at control sites, or to start new infestations? (a) Long-distance (>100m) dispersal by natural means (b) Long-distance (>100m) dispersal by human means</p> <p style="text-align: right;">Total</p> | <p>Score</p> <p>Total</p> <p>1</p> <p>3</p> <p>1</p> <p>3.0</p> <p>2 2</p> <p>7.3</p> | <p>1 high</p> <p>3 < 6 months</p> <p>1 2-5 years</p> <p>3.0 frequent frequent</p> | <p>Q1</p> <p>Q2</p> <p>Q3</p> <p>Q4</p> |
| <p>Current distribution</p> <p>Q1. What percentage area of the land use in the geographical area is currently infested by the weed?</p> <p>Q2. What is the number of infestations, and weed distribution within the geographic area being considered?</p> <p style="text-align: right;">Total</p> | <p>4.0</p> <p>2.0</p> <p>5.0</p> | <p>4.0 20-40% of land use</p> <p>2.0 widespread</p> | <p>Q1</p> <p>Q2</p> |
| <p style="text-align: center;">Comparative feasibility of coordinated control score</p> <p style="text-align: center;">Feasibility of coordinated control category</p> | <p style="text-align: center;">212</p> <p style="text-align: center;">Negligible</p> | | |

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| <p style="text-align: center;">Management priority category</p> <p style="text-align: center;">Calculation of overall uncertainty score</p> <p style="text-align: center;">Response</p> | <p>Manage weed</p> <p>0%</p> <p>Submit Assessment</p> |
| <p style="text-align: center;">Positive Impacts</p> | <p>None</p> |
| <p>References</p> | |
| <p>USA Department of Agriculture International Environmental Weed Foundation Victorian Department of Primary Industries Global Invasive Species Database</p> | |
| <p>Other Comments</p> | |
| <p>See the information on Noogoora burr relating to the taxonomy of the Xanthium genus. Parsons & Cuthbertson give the scientific name of Bathurst burr as <i>Xanthium spinosum</i> L. Seedlings are poisonous to cattle, goats, poultry, sheep and, in particular, horses and pigs. Contact with the plant causes dermatitis in some people. (Parsons, op.cit. p. 320).</p> | |

Source and comments

Parsons, W. T. & Cuthbertson, E.G. 2001, *Noxious Weeds of Australia*, (2nd edition) CSIRO Publishing (p. 320)

ibid., (p.321)

ibid., (pp.320-321)

ibid., (p.320)

ibid., (p.320)

ibid., (p.320)

ibid., (p.320)

ibid., (p.320)

ibid., (pp.318-319)

Personal experience of Upper Macquarie County Council Weeds Officers

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Parsons, op. cit., p. 321

Parsons, op. cit., p. 319

Parsons, op. cit., p. 321

Parsons, op. cit., p. 320

Parsons, op. cit., p. 319

Parsons, op. cit., p. 319

