

External Threats to Cave Systems

- Stupidity
- Development
- Roads
- Dumping
- Logging
- Mining
- Oil and Gas

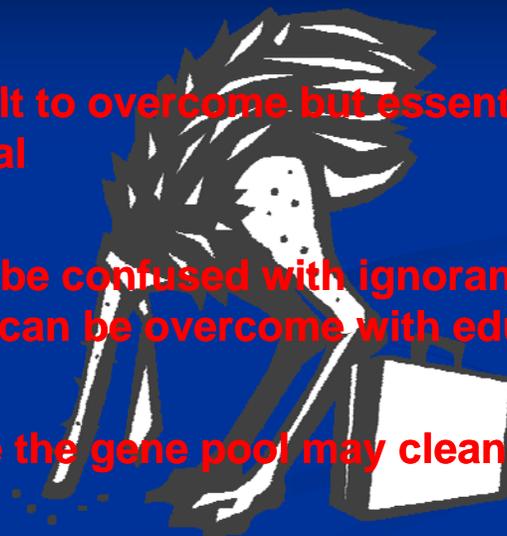


James R. Goodbar
Recreation & Visitor Services
Bureau of Land Management
620 E. Green Street, New Mexico 88220
James_Goodbar@blm.gov

Feb. 14, 2006

Stupidity

- **Difficult to overcome but essential for survival**
- **Not to be confused with ignorance, which can be overcome with education**
- **In time the gene pool may clean itself**





Development

- Urban/Industrial
- Golf Courses
- Agricultural
 - Pavement run-off
 - Decreased infiltration
 - Increased flooding
 - Increased Sedimentation
 - Increased Contamination

Roads

- Collapse
- Drainage from roads into caves
- Spills Draining into caves



Dumping

- Groundwater Contamination
- Harm to cave life
- Hazard to Visitors



Logging

- Increased Sedimentation
- Change in Water Chemistry
- Plugging Entrances



Mining

- Removes the cave
- New entrances may change air & water flow, temperature, and humidity



Oil & Gas Drilling

- Increased Surface Disturbance
- Drilling fluids in caves
- Leaky casing
- Leaky tanks, pits, & pipes
- Truck spills

