To Gravel... or Not To Gravel
Gravel Mulch Trend

- Commercial
Gravel Mulch Trend

- Residential
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History of Gravel Mulch

- Started in 1960s in Arizona...and was painted green.
Who’s Doing It?

- House flippers
- Architects & interior designers
- Landscape companies
- Home owners
Why It’s Being Done

- To create the “clean look”…or “modern desert”
Why It’s Being Done

- To be firewise
Why It’s Being Done

- To benefit the environment
- Reduces water consumption
- No more mowing pollution
Why It’s Being Done

To increase hammock time
The Way We Maintain

- We water too much and too often
The Way We Maintain

- We fertilize too much
The Way We Maintain

- We mow and we mow
The Way We Maintain

- We kill everything, including beneficial insects
We then rake up our leaves and yard “debris”
And then go buy bagged hardwood mulch once a year
And then spread it...sometimes way too deep
It’s exhausting.
However...

Converting lawns and planting areas to gravel and weed barrier is not a good solution.
The Problems

Maintenance • Gravel • Weed Barrier
Maintenance Problems

- Need to blow or vacuum every 1-3 weeks
Some weeds grow through the weed barrier no matter how much you blow or vacuum.
Weeds will eventually grow on top of the weed barrier if the silt is not blown or vacuumed.
Flooding rains can wash out gravels…more so if they’re on top of weed barrier AND on a slope
Eventually weed barrier will be exposed
After a few years, it stops working
However…
compared to conventional lawn maintenance, 
gravel landscapes still require less money and 
less labor to keep them looking new.
Environmental Problems

- Increases heat island effect by as much as 30%
- Darker gravels in full sun are the hottest
Environmental Problems

- The mower is just replaced with the blower or vacuum to prevent weeds: one gas user for another
- Or, people are spraying Roundup on a regular basis to control the weeds
Environmental Problems

- Could be destroying rivers to mine certain gravels
Most weed barrier is a petroleum product
Most weed barrier is now permanent
Environmental Problems

- If silt develops on top of weed barrier, it will eventually form a crust that reduces water infiltration
Environmental Problems

- Weed barrier reduces or kills soil life
- Weed barrier prevents surface burrowing (ex. native bees)
Mycorrhizal fungi extends root network, protects plant roots & secretes glomalin

- Less fungi = less efficient water & nutrient use, less disease protection and more soil erosion
Soil bugs and worms break down organic matter and aerate the soil.

Aerated soil absorbs more water and atmospheric carbon, oxygen and nitrogen than compacted dirt.

Fewer soil bugs and worms = less water infiltration & increased downslope flooding potential.
Environmental Problems

- Permanent weed barrier can strangle & suffocate trees
Good Gravel Use
Good Gravel Use
Good Gravel Use

- Overland Flow Infiltration
Good Gravel Use

- Fire Break
Stop using chemicals to control weeds and insects
For every 1 bad insect, there are 1700 good ones
Use your hands, vinegar or torch for weeds
Better Gravel Solutions

- Reduce area covered with gravel
- Use lighter gravels in sunny areas
- Eliminate permanent weed barrier
- Use non-shiny cardboard for planting areas
- Use caliche base for non-planting areas
Better Solutions

- Reduce your workload: Less water + less fertilizer = less mowing & less thatch
- Eliminate synthetic fertilizers
- Capture and use rainwater…plants love it!
Better Solutions

- Let the lower weeds be…return to the pre-1950s natural lawn
Better Solutions

- Let more areas be “wild”
- Add “clean edges” to define “wild” areas
Better Solutions

- Replace lawn with shredded cedar or hardy groundcovers
- In planting areas, leave the leaves…it’s better than wood or gravel mulch
Better Solutions

- Increase diversity of plants to increase fungi network
Better Solutions

- Increase number of plants with various rooting depths to increase evaporative cooling
Promote a “clean look” that includes a healthy diversity and number of plants
because plants are good
and we live on planet EARTH…not the moon
Maintain the soil and its life…and the soil will take care of the plants
Soil without soil life is just dirt