

# Lean Tool - 5 Why Analysis



## Purpose

- Identification and Analysis of Root Cause

## Application

- When you need to implement corrective action of a problem and want to be sure your actions will address the Root Cause and not just the symptoms of the problem

## Methodology

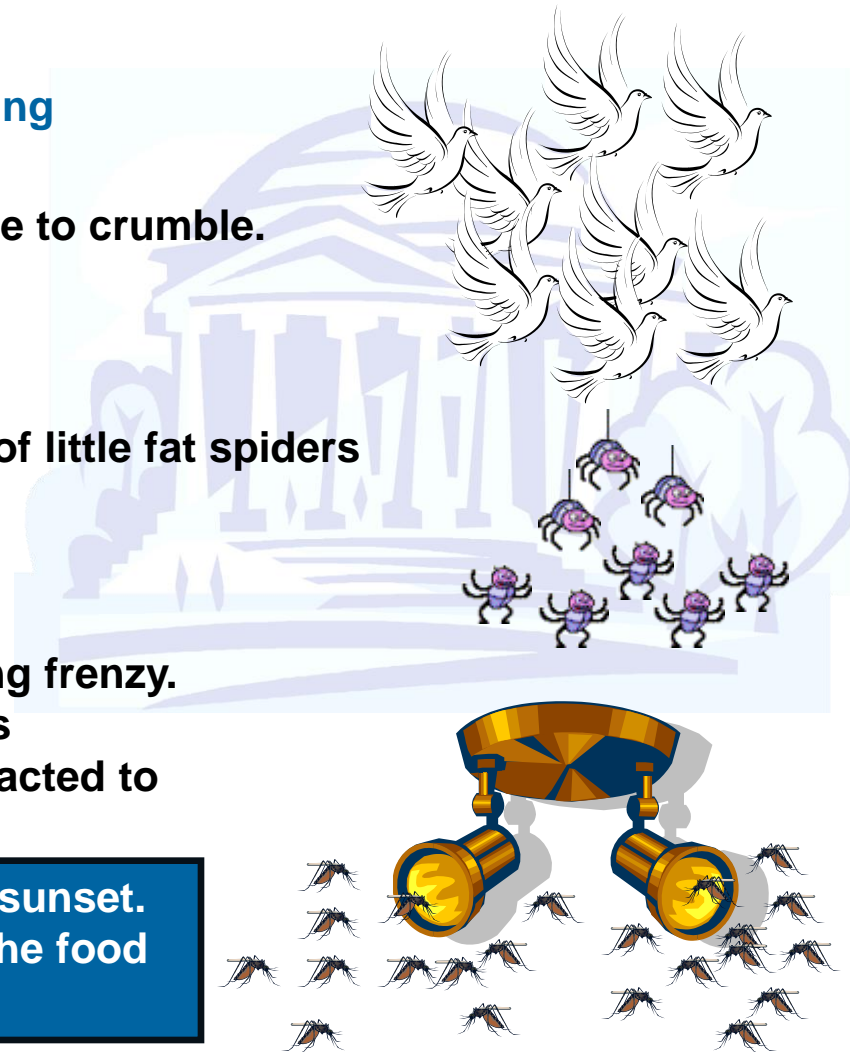
- Question “Why” a given situation exists or condition has occurred
- Document the response
- Evaluate the documented response asking “Why” did this happen or “Why” is this true
- Document the response
- Repeat the process until root cause for original problem is determined

# Lean Tool - 5 Why Analysis

## The stone on the Jefferson Memorial was crumbling

- 1) Why was it crumbling?  
**Too frequent washings were causing the stone to crumble.**
- 2) Why was it washed so often?  
**To remove bird droppings**
- 3) Why were so many birds at the building?  
**There is an abundant food supply: hundreds of little fat spiders**
- 4) Why are there so many spiders?  
**Spiders were attracted to the midges.**
- 5) Why were there so many midges?  
**Every evening at dusk they emerge in a mating frenzy. At the same time the Park Service turns on its powerful spotlights. The midges are then attracted to the lights.**

**Solution: Delay the daily lighting to one hour after sunset. Midge population is down 90%, they have broken the food chain and there are less frequent washings.**



**HOW MANY OF US WOULD HAVE STOPPED TOO EARLY AND SOLVED A SYMPTOM RATHER THAN A ROOT CAUSE?**