GREATER FLAGSTAFF FORESTS PARTNERSHIP WWW.GFFP.ORG	**FOREST TREATMENT AUTO TOUR** ***Woody Mtn Rd – Naval Observatory*** ***Fall 09***

SUMMARY: This auto-tour explores forest treatments on the west side of Flagstaff. The treatments are part of a collaborative effort among many agencies, organizations, and other interested parties to restore our forests to a healthy and sustainable condition, and reduce the threat of destructive wildfire. Formed in 1996, the Greater Flagstaff Forests Partnership has led this successful effort, and has become a model for many other communities faced with similar issues. For more information, visit www.gffp.org.

BACKGROUND: Low-intensity wildfire is both natural and necessary for ponderosa pine forests in the southwest. These fires reduce fuel accumulations, recycle nutrients, and invigorate native grasses, forbs, and flowers. Historically, such fires burned frequently in the area – every 2-5 years on average until the 1880's. Thereafter, societal demands and resulting land-management practices resulted in an unnatural accumulation of fuels, both alive and dead, as evidenced by overcrowded forests, thick needle buildup, and loss of grass and meadows. This unsustainable increase of fuels has resulted in unhealthy forests, loss of critical bio-diversity, and an escalating trend in uncharacteristic, dangerous, destructive, and costly wildfires.

TOUR:

1. Begin at Home Depot (1325 W. Hwy 66 in Flagstaff);
2. Turn west (left) on W. Hwy 66 and travel **1.2 miles** to the intersection of W. Hwy 66 and Woody Mtn Rd –

 This is the view that greeted firefighters responding to the Woody Fire (June 2006) less than 20 minutes after the fire was reported: Note the flame heights (estimated to be over 100 feet above the tree tops, and the close proximity of the homes.	 This is the scene today: the 120-acre wildfire killed and consumed all trees within the fire area. The fire was only stopped here because of thinning the forest several years before, along the road. This gave firefighters the safe space they needed to operate.

3. Continue west of W. Hwy 66 for **2.0 miles** to the intersection of W. Hwy 66 and the Naval Observatory Rd –

Look south across W. Hwy 66 toward I-40. This "wall-of-wood" is indicative of the overcrowding that is literally choking our forests. Within the area you are viewing, there are nearly 2,100 trees per acre! Considering that, historically, tree densities in our area averaged only 30-50 trees per acre – quite a difference, and one that leads to poor health, and an increased likelihood of death by fire, insect, disease, or drought.	

4. Turn north (right) on Naval Observatory Rd and follow it around for **1.6 miles**: pull into the unimproved parking area on the right side of the road –

	This area is located immediately next to where you are now parked. The site was thinned about 15 years ago. Can you guess how many trees per acre there are? Nearly 600 per acre, well above the historical norm for our area. When the site was thinned, tree tops were separated, but have grown together in the years since. Despite their "green" appearance, these trees, like those at the previous stop, are crowded and stressed. Note the lack of grasses and forbs on the ground.

5. Walk about **30 yards** down the dirt road to the west (behind this site), until you encounter the boundary signs for the Naval Observatory –

This area has been thinned to historical norms – 30-50 trees per acre. Note the open park-like nature of the area, something early explorers noted in their journeys as characteristic of the region. Also notice the presence of grass, flowers, and other vegetation on the forest floor.	

6. Now, turn around and walk back toward your vehicle, and then walk directly across the Naval Observatory Rd –

	This area has also been thinned, but not to the extent of the site behind you that you just viewed. Here, there are roughly 100 trees per acre. In addition to the grass and other vegetation on the forest floor, there is something else: can you find it? Hidden among the grasses, there are upwards of 1,000 tree seedlings per acre, each 1-3 years old. They will form the next forest – one that if not "thinned" by fire or other means, will, within the next 50 years, look like the forest we found at Point 3.

7. Walk about **100 yards** up the Naval Observatory Rd: do not drive as there are no turn-around spots until you are at the Observatory itself –

A small fire burned through this area in 2008. Note that some branches were singed and the bark at the base of the trees was scorched, but that no trees were killed. The very small seedlings found at the previous stop are susceptible to low-intensity fires. But these larger ponderosa pines are well-equipped to survive low-intensity fires. This site shows that low-intensity fire, by itself, does not kill trees, but severe fires, like the Woody Fire, kill all trees. From this we learn that selective thinning is most often required as a first step toward reducing and restoring our forests.	

8. Return to your vehicle, and drive back along Naval Observatory Rd to its intersection with W. Hwy 66. Turn east (left) and drive back to Woody Mnt Rd. Turn south (right) on Woody Mtn Rd and drive **4.0 miles** to the *Arboretum at Flagstaff.* As you travel, note the forest treatments that have occurred, including those at Flagstaff Ranch Subdivision, one of the nationally recognized FireWise neighborhoods in the Flagstaff area.

   If time permits, visit the *Arboretum*: walk the *Charles O. Minor* nature trail and visit the educational kiosk to learn more about forest treatments and FireWise building construction and property maintenance.

9. From the entrance to the *Arboretum* property, continue down Woody Mtn Rd another **.1 mile** to the intersection of Forest Rd 533 (on your left). Turn down this road and drive another **.1 mile** to the large educational sign –

This sign explains the "art-and-science" of forest restoration work, and what we seek to accomplish in our efforts. By now, you should be familiar with the issue and the cure. Will you help us?

Forest restoration work is not quick or easy, but it is necessary if future generations of residents and visitors will enjoy the forests that we cherish today. Without help, the future of our forests is in doubt.

10. Continue south on Forest Rd 533 (and bear right at the intersection), for another **.6 mile** –

You are now at the site of a different type of forest restoration work. Here, the emphasis was to create openings and group trees into clumps, more reminiscent of historical descriptions and photographs from the late 1880's.

The work you see is simply a variation of the natural forest one should expect to see throughout our area.

11. Continue down this road for another **.3 miles** until you encounter a road intersection (the right fork is gated). Turn around and travel back to Woody Mtn Rd.

12. Turn right (east) on Woody Mtn Rd (back toward the Arboretum) and travel **2.2 miles** to the intersection of Woody Mtn Rd and Forest Rd 532. Turn right (east) –

For the next **2.3 miles**, you will travel through other forest treatments that have been recently completed. Each site, regardless of ownership or jurisdiction, requires a slightly different approach depending upon the specific factors found on that site. But all work is focused on the same goals:

- ***Restoring our forests, and***
- ***Protecting our community, and forest, from destructive wildfire***

13. You are now on Hwy 89A: Turn left to return to Flagstaff. We trust you enjoyed your tour!