



West Virginia Firewise in the Classroom

Firewise Communities: Reducing the Risk of Wildfire

Firewise Communities: Reducing the Risk of Wildfire

Paper: STAR TRIBUNE (Mpls.-St. Paul) Newspaper of the Twin Cities

Headline: Gopher exterminators charged in fire that destroyed 5 homes

Date: 05/16/00

Edition: METRO

Byline: Warren Wolfe; Staff Writer

Two men trying to eradicate gophers with propane have been charged with negligence for allegedly causing a May 3 wildfire near Princeton, Minn. Four houses and a mobile home were destroyed.

"What they were doing was putting propane in gopher holes and then igniting it on one of the worst days possible," said Mark Wurdeman, a forester in the Cambridge office of the Department of Natural Resources (DNR).

"They got a back-flash of fire that ignited extremely dry grass on a hot day with 20-mile-per-hour winds," Wurdeman said. "We got on it very fast, but it went almost immediately from firefighting to evacuation because of the homes nearby."

The two men were ticketed and face possible modest fines. But if they plead or are found guilty, the DNR would file civil action seeking to recover firefighting costs estimated at \$40,000 to \$50,000.

Charged were Nicolas Ryan Narveson, 20, of Milaca, and Craig Louis Rabenberg, 24, of Ramsey. Court appearances have been set for June 6. Each could each pay a \$130 fine; if they are found guilty; a judge could sentence them to 90 days in jail or fine them \$700, said Sherburne County Attorney Walter Kaminsky.

The fire started in an old Christmas tree farm. All the homes lost in the fire were hemmed in by thick growths of Scotch pines, which made it impossible for firefighters to save the houses, Wurdeman said.

Thousands of houses in forested areas face similar danger, he said.

"People move into the woods for the beautiful scenery, but you've got to get a big enough clearing around your buildings," he advised. "When a fire starts in dense pines, often we can't get in there to protect your property. The results are catastrophic."

Most burn bans lifted

After recent rains that have lowered the danger of fire, the DNR on Monday lifted burning restrictions in all of northern Minnesota except the blow-down area of the Boundary Waters Canoe Area Wilderness.

"The danger of wildfires is low in almost all of the state after the recent rain and the green up of vegetation," said spokeswoman Jean Bergerson at the Minnesota Interagency Fire Center in Grand Rapids.

Fire danger remains moderate near the northern border and high along the northern part of the North Shore, the Fire Center reported. No new wildfires were reported Monday.

Some counties have restricted burning. Information about those restrictions can be obtained from county sheriffs, Bergerson said.

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Firewise Communities: Reducing the Risk of Wildfire

Paper: STAR TRIBUNE (Mpls.-St. Paul) Newspaper of the Twin Cities

Headline: Three homes are destroyed as flames cover 7 square miles // A record-high 84 degrees and extreme dry conditions created a day of fires.

Date: 20001020 10/20/00

Edition: METRO

Byline: Warren Wolfe; Maria Elena Baca; Staff Writers

Hundreds of people were told to leave a mobile home park in Stacy as a precaution early this morning as the biggest metro-area wildfire in several years swept a half-mile-wide path through the Carlos Avery Wildlife Area near Interstate Hwy. 35 north of the Twin Cities.

By late evening Thursday, the fire had covered 4,000 to 5,000 acres, or about 7 square miles - a flaming thin line that lit up the night, snaking for miles through the wildlife area and burning grass and brush near houses just west of Interstate Hwy. 35.

Three houses were destroyed and others near Wyoming were threatened.

East of the highway, at the Sunrise Estates Mobile Home Park at the intersection of I-35 and County Road 19, authorities began the evacuation of about 250 units shortly before midnight and sent residents to churches in surrounding communities. "There are so many people in the trailer court and in that area," said Mary Nalewaja, a dispatcher of the Chisago County Sheriff's Office. "The fire is close enough that they want to get them out."

To the west of I-35, near the front of the fire, dozens of residents were told to leave their homes, and more than 90 state and local firefighters - involving 30 to 40 departments - were working along the half-mile head of the fire through the night to protect houses, officials said.

Crews contained the leading edge of the fire in the area's north end about 10:30 p.m., said David Schuller, a spokesman for the Department of Natural Resources.

"That was our biggest concern tonight," he said. "There are still some homes in that end, but they aren't in any imminent danger right now."

Schuller said more work lies ahead today.

"The big concern will be containing the east flank of the fire," he said. "If we get huge winds across the interstate (35), we could have big problems."

Officials said the fire probably won't be under control until Saturday and warned that the morning commute today on I-35 could be obscured by smoke from the fire.

The Carlos Avery fire was the largest of seven Thursday driven by high winds and fueled by dry grass and brush.

The Minnesota National Guard will be on the scene this morning to control access to the fire area.

By late evening, officials said the fire was 20 percent contained, which means a fire break had stopped about one-fifth of the fire's perimeter.

Rich Gabrick, Linwood Township fire chief, said some slight burns but no major injuries were reported.

The houses that burned were "sort of tucked into the woods. There are a number of houses like that that are threatened," said Schuller.

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Headline: Three homes are destroyed as flames cover 7 square miles // A record-high 84 degrees and extreme dry conditions created a day of fires.

Flames crossed Viking Boulevard and Anoka County Rd. 75 at several points during the evening and came near a development with about 30 houses, just off Viking Boulevard a few miles west of I-35, he said.

The Anoka County Sheriff's Office couldn't say how many people were asked to leave their homes Thursday. Many of them went to the nearby Linwood Town Hall. The Red Cross set up shelters at St. John's Lutheran Church in Stacy and Our Savior's Lutheran Church in East Bethel.

Just off I-35, parking lots at the Wyoming Citgo station and Village Inn were packed with cars and milling people who couldn't go to their homes but were unwilling to leave behind the vista of the dusty glow to the west.

The usual sounds of a service station were punctuated with beeping cell phones and the wailing sirens of emergency vehicles - fire trucks, water tankers and others - that wended their way up Viking Boulevard.

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Firewise Communities: Reducing the Risk of Wildfire

Paper: STAR TRIBUNE (Mpls.-St. Paul) Newspaper of the Twin Cities

Headline: A troubled homecoming // Though most lost little, a few lost much in fast-moving fire

Date: 06/02/02

Edition: METRO

Byline: Jill Burcum; Maria Elena Baca; Staff Writers

Joann Ostrowski went to the still-smoking ruins of her home near Brainerd on Saturday hoping to find some memento of her family's 15 years there.

She kept a brave smile even as her hope faded. Other than a chimney, the twisted steel of doors and appliances and blackened concrete blocks, there was nothing.

No pictures. None of the treasured antiques inherited from her mother. Not even a piece of the wood or drywall the family had put up when they built the house.

"It's just ashes. It's all gone," said Joann as she and her niece, Dawn Jillson, gazed at the wreckage. "You'd think there'd be something left. I just can't believe it."

No one was hurt in the wildfire that scorched 720 acres southwest of Brainerd Friday.

All those who had been asked to leave their homes were back by Saturday afternoon. By the time crews were let go at 7 p.m., the fire was 95 percent contained, with no large areas still in flames.

Smaller wildfires were reported Saturday across northern Minnesota. Two blazes covering more than 100 acres each in a remote area of Lookout Mountain near Finland were abandoned by fire crews called to the Brainerd area, said Jean Bergerson of the Minnesota Interagency Fire Center.

They were to be replaced by a 21-member fire management team from Montana and Idaho beginning today.

Near Brainerd, the Ostrowskis' house was one of just two that burned, although dozens lay in the fire's path. Wilson School, a three-room structure built in 1914, also was destroyed, along with several storage buildings. Damage estimates were not available Saturday.

Fireworks suspected

Officials are investigating whether the fire was caused by fireworks used by teens partying near the Mississippi River on Thursday night.

Elliott Ruckdaschel, who lives near Wilson School, said he saw about 100 kids at a bonfire party when he drove his all-terrain vehicle by the river with his kids.

Fire investigators from the state Department of Natural Resources used magnifying glasses to search for evidence.

Officials believe the fire started Thursday night, smoldered overnight and burst into flames Friday afternoon. Aided by strong winds and dry conditions, it spread rapidly eastward in tall grass to a canopy of young red pine.

By the time it was reported about 1 p.m. Friday, it was too big and too hot to fight on the ground, and the first line of defense went to the air. DNR planes and helicopters were called in to scoop water from area lakes and dump it on the leading edge of the fire.

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The planes and choppers made dozens of runs over the blazing wedge of forest and swamp, mainly between the new Crow Wing County Rd. 371 bypass and Old Hwy. 371 southwest of Brainerd.

By Saturday morning, officials at the DNR tanker base in Brainerd estimated that they had dumped more than 26,000 gallons of water and fire retardant.

Crews in bulldozers, water-tank-bearing trucks and all-terrain firefighting vehicles came next, followed by crews who worked on foot, spraying water on the remaining hot spots.

Meanwhile, about 100 volunteer firefighters from a dozen departments worked to protect homes. DNR spokesman Mark Wurdeman estimated that their efforts saved about a half-dozen homes.

By 3:30 p.m. Friday, residents of Barrows, about 5 miles southeast of Brainerd, could see smoke billowing. Many people reported seeing flames leap from treetop to treetop as the jack pine forest went up like kindling. Smoke from the fire was visible more than 30 miles away.

On Saturday, Barrows residents were counting their blessings and recounting tales of how close they came to losing their homes, possessions and even their lives.

"It's a miracle everything turned out as well as it did," Ruckdaschel said.

Residents made the rounds, checking on friends and neighbors.

A close call

Elaine and Ronald Johnson's home was spared, but that wasn't the only reason they felt fortunate.

On Friday, just as the blaze began, Ronald Johnson drove his all-terrain vehicle out to gauge the fire's severity and distance from their house. He surveyed the burgeoning blaze from a familiar ridge. When he turned to go home, smoke and fire were blocking his route.

At one point, he said, he could see flames 60 feet high. Cinders rained down on him and the heat grew intense, burning the skin on his forearms and singeing his hair.

He said he didn't panic, but created his own trail and linked up with another trail to get home, skirting the fire.

As Johnson fought his way home, Elliott Ruckdaschel and his father, Earl, were watching the fire leap closer.

His garage was damaged when cinders fell on it. Blistered paint on one side of the garage also was testimony of the fire's heat.

The Ostrowskis, too, still managed to count their blessings Saturday. Their home was gone, "but we still have each other," Joann Ostrowski said.

Already she and her husband, Greg, were making plans to build a new house, but probably on other property they own nearby.

And they did manage to salvage something important. A tiny unnamed kitten they'd just gotten from a relative escaped and wandered to the road, where Greg Ostrowski rescued it.

Its hair was singed, and it was scared, but it survived, Joann Ostrowski said. "And now we have a name for it. Kitty is now called Smokey."

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Firewise Communities: Reducing the Risk of Wildfire

Lesson 5: Using Census Data to Explore Population Growth and Change

**2006 Population Estimates Ranked by Population Size,
Counties in West Virginia Page 1 of 2 (WV_2006_pop_est_cty_rank.pdf)**

GCT-T1-R: Population Estimates (geographies ranked by estimate)
Data Set: 2006 Population Estimates
Geographic Area: West Virginia -- county

Note: For information on errors stemming from model error, sampling error, and nonsampling error, see: <http://www.census.gov/popest/topics/methodology>.

Rank	Geographic area	Population Estimates							Estimate Base	Census 2000
		July 1,2006	July 1,2005	July 1,2004	July 1,2003	July 1,2002	July 1,2001	July 1,2000	April 1,2000	April 1,2000
	West Virginia	1,818,470	1,814,083	1,810,906	1,808,660	1,804,146	1,801,411	1,807,528	1,808,350	1,808,344
1	Kanawha	192,419	193,413	194,772	195,470	195,990	197,719	199,699	200,073	200,073
2	Berkeley	97,534	93,286	89,228	85,330	81,414	78,708	76,445	75,905	75,905
3	Cabell	93,904	93,988	94,461	94,948	95,390	95,819	96,674	96,785	96,784
4	Wood	86,597	86,881	86,945	87,246	87,681	87,727	87,902	87,986	87,986
5	Monongalia	84,752	84,592	84,034	83,670	82,705	82,315	81,866	81,866	81,866
6	Raleigh	79,302	79,186	79,174	79,085	79,202	78,524	79,092	79,220	79,220
7	Harrison	68,745	68,462	68,310	67,983	67,970	68,051	68,601	68,652	68,652
8	Mercer	61,278	61,374	61,833	62,022	62,127	62,004	62,944	62,980	62,980
9	Marion	56,706	56,662	56,422	56,465	56,297	56,254	56,516	56,598	56,598
10	Putnam	54,982	54,389	53,730	52,991	52,276	51,716	51,751	51,586	51,589
11	Jefferson	50,443	49,160	47,557	46,315	44,943	43,435	42,451	42,190	42,190
12	Fayette	46,610	46,558	46,947	47,294	47,126	47,215	47,521	47,579	47,579
13	Ohio	44,662	44,958	45,309	45,612	46,241	46,653	47,341	47,433	47,427
14	Wayne	41,647	41,959	42,317	42,388	42,421	42,772	42,915	42,903	42,903
15	Logan	36,218	36,216	36,299	36,725	36,988	36,890	37,586	37,710	37,710
16	Greenbrier	34,850	34,830	34,738	34,700	34,583	34,431	34,421	34,453	34,453
17	Marshall	33,896	34,250	34,602	34,837	34,999	35,294	35,405	35,519	35,519
18	Hancock	30,911	31,191	31,373	31,739	32,048	32,294	32,628	32,667	32,667
19	Preston	30,384	30,052	29,817	29,684	29,628	29,299	29,308	29,334	29,334
20	Randolph	28,465	28,506	28,436	28,214	28,371	28,267	28,220	28,262	28,262
21	Jackson	28,451	28,306	28,416	28,224	28,222	28,053	28,059	28,000	28,000
22	Mingo	27,100	27,165	27,276	27,585	27,721	27,573	28,035	28,253	28,253
23	Mineral	26,928	26,940	26,994	27,114	27,097	27,029	27,044	27,078	27,078
24	Nicholas	26,446	26,369	26,303	26,266	26,366	26,315	26,561	26,562	26,562
25	Mason	25,756	25,763	25,849	26,010	26,043	26,078	25,972	25,959	25,957
26	Boone	25,512	25,613	25,638	25,715	25,649	25,495	25,513	25,535	25,535

Source: U.S. Census Bureau, Population Estimates Program

More Tables and Information: Population Estimates Program

NOTE: The April 1, 2000 Estimates Base reflects modifications to the Census 2000 population as documented in the Count Question Resolution program, updates from the Boundary and Annexation Survey, and geographic program revisions. An "(X)" for the Census 2000 value indicates a locality that was formed or incorporated after Census 2000 or was erroneously omitted from Census 2000. See Geographic Change Notes for additional information on these localities.

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Lesson 5: Using Census Data to Explore Population Growth and Change
2006 Population Estimates Ranked by Population Size,
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		July 1,2006	July 1,2005	July 1,2004	July 1,2003	July 1,2002	July 1,2001	July 1,2000	April 1,2000	April 1,2000
27	Wyoming	24,225	24,397	24,484	24,854	24,930	25,219	25,610	25,708	25,708
28	Brooke	24,132	24,474	24,694	24,954	25,037	25,187	25,376	25,447	25,447
29	McDowell	23,882	24,267	24,667	25,319	26,045	26,554	27,172	27,329	27,329
30	Upshur	23,685	23,586	23,764	23,733	23,390	23,355	23,413	23,404	23,404
31	Hampshire	22,480	22,011	21,490	21,270	20,955	20,668	20,320	20,203	20,203
32	Lincoln	22,357	22,446	22,398	22,362	22,310	22,176	22,133	22,108	22,108
33	Lewis	17,129	17,127	17,100	17,065	16,897	16,921	16,878	16,919	16,919
34	Wetzel	16,685	16,974	17,063	17,095	17,254	17,311	17,680	17,693	17,693
35	Morgan	16,337	15,987	15,745	15,545	15,317	15,227	15,015	14,943	14,943
36	Taylor	16,304	16,182	16,153	16,139	16,123	16,104	16,103	16,089	16,089
37	Barbour	15,788	15,656	15,496	15,587	15,528	15,439	15,548	15,557	15,557
38	Roane	15,583	15,445	15,298	15,371	15,286	15,454	15,469	15,446	15,446
39	Braxton	14,810	14,856	14,880	14,810	14,799	14,759	14,714	14,702	14,702
40	Summers	13,531	13,632	13,792	13,941	13,996	14,217	14,323	14,388	12,999
41	Monroe	13,510	13,539	13,494	13,444	13,324	13,256	13,219	13,194	14,583
42	Hardy	13,420	13,303	13,157	13,040	12,833	12,805	12,695	12,669	12,669
43	Grant	11,915	11,688	11,570	11,446	11,345	11,345	11,288	11,299	11,299
44	Ritchie	10,628	10,529	10,442	10,500	10,416	10,348	10,337	10,343	10,343
45	Clay	10,256	10,318	10,413	10,338	10,392	10,293	10,341	10,330	10,330
46	Webster	9,696	9,739	9,835	9,781	9,740	9,677	9,700	9,719	9,719
47	Tyler	9,264	9,303	9,366	9,414	9,405	9,526	9,592	9,592	9,592
48	Pocahontas	8,755	8,829	8,933	8,961	8,954	8,940	9,111	9,131	9,131
49	Pendleton	7,679	7,764	7,874	7,916	7,936	8,072	8,167	8,196	8,196
50	Doddridge	7,459	7,474	7,401	7,466	7,447	7,455	7,416	7,403	7,403
51	Calhoun	7,381	7,367	7,343	7,326	7,367	7,418	7,584	7,582	7,582
52	Pleasants	7,280	7,329	7,425	7,403	7,534	7,536	7,507	7,514	7,514
53	Gilmer	6,965	6,962	6,986	7,008	7,011	7,116	7,167	7,160	7,160
54	Tucker	6,856	6,948	7,027	7,151	7,232	7,217	7,299	7,321	7,321
55	Wirt	5,980	5,882	5,836	5,789	5,845	5,886	5,881	5,873	5,873

Source: U.S. Census Bureau, Population Estimates Program
 More Tables and Information: Population Estimates Program

NOTE: The April 1, 2000 Estimates Base reflects modifications to the Census 2000 population as documented in the Count Question Resolution program, updates from the Boundary and Annexation Survey, and geographic program revisions. An "(X)" for the Census 2000 value indicates a locality that was formed or incorporated after Census 2000 or was erroneously omitted from Census 2000. See Geographic Change Notes

Lesson 5: Using Census Data to Explore Population Growth and Change

Population Change 2000-2006, Population Estimates
 Counties Ranked by largest percentage change in Population
 Counties in West Virginia

Positive Growth Counties	# Pop change 2000-06	% Pop change 2000-06	Negative Growth Counties	# Pop change 2000-06	% Pop change 2000-06
Berkeley	21,629	28.49%	Nicholas	-116	-0.44%
Jefferson	8,253	19.56%	Mingo	-153	-0.54%
Morgan	1,394	9.33%	Mineral	-153	-0.56%
Putnam	3,393	6.58%	Clay	-74	-0.72%
Hardy	751	5.93%	Mason	-201	-0.77%
Grant	616	5.45%	Wood	-1,389	-1.58%
Preston	1,050	3.58%	Wyoming	-483	-1.88%
Monongalia	2,886	3.53%	Calhoun	-201	-2.65%
Ritchie	285	2.76%	Mercer	-1,702	-2.70%
Monroe	316	2.39%	Gilmer	-195	-2.72%
Fayette	969	2.04%	Wayne	-1,256	-2.93%
Wirt	107	1.82%	Cabell	-2,880	-2.98%
Jackson	451	1.61%	Pleasants	-234	-3.11%
Barbour	231	1.48%	Tyler	-328	-3.42%
Hampshire	277	1.37%	Kanawha	-7,654	-3.83%
Taylor	215	1.34%	Logan	-1,492	-3.96%
Lewis	210	1.24%	Marshall	-1,623	-4.57%
Upshur	281	1.20%	Brooke	-1,315	-5.17%
Greenbrier	397	1.15%	Hancock	-1,756	-5.38%
Lincoln	249	1.13%	Wetzel	-1,008	-5.70%
Roane	137	0.89%	Ohio	-2,765	-5.83%
Doddridge	56	0.76%	Summers	-857	-5.96%
Braxton	108	0.73%	Pendleton	-517	-6.31%
Randolph	203	0.72%	Tucker	-465	-6.35%
Webster	23	0.24%	Pocahontas	-837	-9.17%
Marion	108	0.19%	McDowell	-3,447	-12.61%
Harrison	93	0.14%			
Raleigh	82	0.10%			
Boone	23	0%			

Middle School Supplement (MSS) Lesson 1: Population Pyramids

2005 American Community Survey: Population Profile

(WVpopulation_profile.pdf)



West Virginia

General Demographic Characteristics: 2005
 Data Set: 2005 American Community Survey
 Survey: 2005 American Community Survey

NOTE. Data are limited to the household population and exclude the population living in institutions, college dormitories, and other group quarters. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [Survey Methodology](#).

General Demographic Characteristics: 2005	Estimate	Margin of Error
Total population	1,771,750	*****
SEX AND AGE		
Male	966,032	+/-2,639
Female	905,718	+/-2,639
Under 5 years	98,936	+/-935
5 to 9 years	98,841	+/-3,797
10 to 14 years	114,064	+/-3,959
15 to 19 years	107,108	+/-2,053
20 to 24 years	113,567	+/-2,875
25 to 34 years	216,671	+/-2,855
35 to 44 years	248,115	+/-2,504
45 to 54 years	283,711	+/-1,865
55 to 59 years	128,316	+/-4,065
60 to 64 years	96,036	+/-3,867
65 to 74 years	142,577	+/-1,205
75 to 84 years	93,849	+/-2,110
85 years and over	29,959	+/-1,957
Median age (years)	40.7	+/-0.2
18 years and over	1,391,259	+/-1,111
21 years and over	1,329,220	+/-2,725
62 years and over	324,798	+/-3,015
65 years and over	266,385	+/-1,132

Lesson 6: Introduction to GIS and AtlasGDS

How to access AtlasGDS from the WV Firewise Flash Drive

West Virginia Firewise AtlasGDS

Starting AtlasGDS

1. Connect WV Firewise Flash Drive. Windows will start show a menu Window. Cancel this window.
2. Using Windows Explorer, Navigate to **WV_Firewise (E): \AtlasGDS\ folder.**
3. Double Click: **AtlasGDS.exe** to start program.
4. Select: **Open Study Area** option & browse to **WV_Firewise(G):\AtlasGDS\ folder.** The **30 - Meter WV Study Area** will appear.
5. Select **WMS: Air Photo (SAMB 03) Layer.**

Unplugging WV Firewise AtlasGDS Flash Drive

1. Close all programs
2. Click on **Safety Remove Hardware** button in the lower right task bar.
3. Select USB Mass storage Device Drive (E)
4. Wait until the system says it is **Save To Remove** the USB Mass Storage device. If a notice '**Generic volume**' cannot be stopped right now appears check for open programs and repeat steps 1-3.
5. If you can not stop the device, Shut Down the PC. This will close all open programs and allow you to eject the flash drive.



Level 2 Firewise Community Assessment Field Guide - Student Edition

Fill in this guide neatly as you watch the Conducting a Level 2 Firewise Assessment PowerPoint presentation. It will serve as a reference during the Level 2 Firewise Assessment.

- 3 Major Factors You Will Be Assessing:
 - 1.
 - 2.
 - 3.
- Write on the _____ copy of the Residential Hazard Assessment form.
- Fill In the Home and Evaluator Information
 1. Address, City, Assessment Date, Agency (school name), GPS Unit #, Evaluator (your name).
 2. Take _____ GPS readings and record the waypoint number and UTM coordinates.
 - Take one GPS reading at:
 - Take the other GPS reading at:
- Greet the Homeowner
 1. Introduce yourself.
 2. Present the Dear Homeowner Letter and ask permission to assess the property. Invite the homeowner to join you. Tell them the assessment will take about 15 minutes.
 3. If the homeowner denies permission, thank them and leave politely.
 4. If the homeowner is not home, do the assessment from the driveway.
 5. Leave the door hanger with the homeowner, or on the most visible door.

Firewise Communities: Reducing the Risk of Wildfire

Level 2 Firewise Community Assessment Field Guide - Student Edition (Continued)

▪ Doing the Assessment

▪ Subdivision Design Factors

1. If the factor is present, circle the score.
2. Items #s _____ and _____ will be the same for all homes in a development.

Terms to know:

Access road:

Cul-de-sac:

3. Distances can be estimated using guidelines discussed in class or measured with a measuring tape.
4. Why are reflectorized street signs important?

▪ Site Factors

1. What other types of water sources should you look for if a fire hydrant is not present?
2. Be especially observant when walking up the driveway. If the homeowner denies permission to inspect the property, this is your only opportunity to get valuable information.
3. For items #s _____ through _____, concentrate on the area within _____ feet of structures. (The defensible space.)

Terms to know:

Evergreen:

Hardwood:

Ladder fuels:

Tree crowns:

4. How can you tell if the property is built on a steep slope?

Firewise Communities: Reducing the Risk of Wildfire

Level 2 Firewise Community Assessment Field Guide - Student Edition (Continued)

5. What should you do if there are outbuildings within 30 feet of the home?

6. What are some indicators of outdoor burning to look for?

- **Structural Factors**

1. Which structure should you assess?

Terms to know:

Soffit:

Attic vent:

Open foundation:

Vinyl siding:

Unskirted deck:

- **When You Finish The Assessment**

1. Calculate the risk by adding up the scores.
2. Write the total next to Home Hazard Rating. Circle the Low, Moderate, High or Extreme Rating.
3. Transfer recommendations to appropriate check boxes. (Note how they correspond to assessment items.)
4. Add any additional notes at the bottom of the form.
5. Double-check your work.
6. Carefully detach the yellow door hanger. Leave the green copy in the booklet.
7. Give the form to the homeowner or hang it on the most visible door.

Firewise Communities: Reducing the Risk of Wildfire

Woodland Home Hazard Assessment form (on Firewise Teacher DVD 4) (FWWV Home Risk Form Sept06.pdf)



WEST VIRGINIA DIVISION OF FORESTRY
FIREWISE WEST VIRGINIA PROGRAM
WOODLAND HOME WILDFIRE HAZARD ASSESSMENT



Homeowner Name, Address & Phone:		Occupancy Status:	Property ID (Lot No.):
Community Name & Location (if applicable):		Structure Type:	County:
Evaluator Name(s):		Evaluation Date:	Photo(s) Taken:
GPS Filename (if applicable):	Datum Used:	Latitude:	Eastings:
		Longitude:	Northing:

Evaluate the home by considering the site hazard, structure hazard and hazard reduction factors. Enter the appropriate rating for each factor, and calculate the category subtotal. Enter the County HRVP rating and calculate the overall Wildfire Hazard Rating for the property; using this value, mark the associated risk/hazard level. Be sure to mark what actions were taken at the time of evaluation. NOTE: If completing form electronically, some values will be automatically calculated.

SITE HAZARD RATING:	Rating	Rating
ACCESS AND VISIBILITY: Can emergency personnel find and access this home?		
Driveway < 150 feet long	(0)	Use best judgment in estimating these factors - actual measurements are not required.
Driveway > 150 feet with adequate turnaround	(3)	
Driveway > 150 feet with inadequate turnaround	(5)	
Average driveway width more than 12 feet	(0)	
Average driveway width less than 12 feet	(5)	
No overhead branches below 14 feet high	(0)	
Obstructing overhead branches below 14 feet	(5)	
No bridges or bridges with no restrictions	(0)	
Inadequate surface/bridges for emergency vehicles	(5)	
Road grade level or less than 10%	(0)	
Road grade over 10%	(5)	
No gate/non-locking gate	(0)	
Locked gate restricting access	(5)	
Address visible from road (on house/end of drive)	(0)	
Address not visible from the road or not found	(5)	
SURROUNDING TREES: Choose the predominant tree type within 30' of the home.		
No trees within 30 feet	(0)	
Hardwoods (trees with deciduous leaves)	(4)	
Mixed (Hardwoods and Conifers/Evergreens)	(7)	
Conifers/Evergreens (non-deciduous)	(10)	
LADDER FUELS: Can fire spread from surface to aerial fuels?		
Include low limbs, underbrush, vines, etc.	No (0) Yes (5)	
FUEL CONNECTION: Are ground fuels touching or within 3 feet of the home?		
Include ornamental shrubs, leaves, grass, weeds, mulch beds, etc.	No (0) Yes (5)	
GROUND COVER: Choose the primary type ground cover within 30' of the home.		
Sand, gravel, etc. (non-combustible)	(0)	
Grasses, up to 6" tall (established yard)	(3)	
Grasses over 6" tall (broomsedge, heavy weeds, etc.)	(10)	
Herbaceous understory or forest leaf litter	(15)	
Shrubs w/leaves (include creeping or spreading, i.e. ground ivy)	(5)	
Shrubs w/needles (creeping/spreading, i.e. spreading juniper)	(7)	
SLOPE OF PROPERTY: What is the average slope around the structure(s)?		
Gradual (0 - 10%)	(0)	
Moderate (11 - 30%)	(5)	
Steep (over 30%)	(10)	
FIREWOOD, DEBRIS OR COMBUSTIBLES: Where are fuel 'jackpots' located?		
None	(0)	
Include firewood piles, brush piles, stored lumber, outdoor furniture, etc.	Located more than 30' from structure (1) Located 3' to 30' from structure (5) Located 0 to 3 feet from structure (10)	
FLAMMABLE MATERIALS: Where are highly flammable materials stored?		
None/Unknown	(0)	
Include gas cans, gas grills, lawnmowers, pesticides, etc.	Located more than 30' from structure (1) Located 3' to 30' from structure (5) Located 0 to 3 feet from structure (10)	
OTHER POTENTIAL HAZARDS: Are there any external fire hazards present?		
Include outbuildings, LP gas storage tanks, etc. within 30 feet of the structure	No (0) Yes (5)	
TOTAL SITE HAZARD RATING		

STRUCTURE HAZARD RATING:	Rating
ROOFING MATERIALS: What is the roof covering of the home?	
Metal, Slate, Tile or Class A Shingles	(0)
Roll roofing or non-rated roof material	(5)
Wood (cedar shingles or shakes)	(15)
FOUNDATION: What type of foundation does the home have?	
Enclosed (fireproof, i.e. concrete, metal)	(0)
Enclosed with wood or vinyl sheathing	(5)
Open-air foundation (piers, sills, etc.)	(10)
EXTERIOR WALLS: What is the predominant outer wall covering of the home?	
*Evaluator option to zero out the Total Structure Hazard Rating value	*Brick, Stone or Metal (0) Vinyl or Wood (5)
VENTS AND EAVES: Are these areas protected from flying embers?	
Enclosed with plastic or metal screens	(0)
Exposed wood, open soffits/fascia, or unscreened vents	(5)
ATTACHMENTS: Are there any attachments to the structure(s)?	
Include decks, overhangs, fences, trellises, etc.	No (0) Yes (5)
FUEL TRAPS: Any areas where leaves/debris can accumulate?	
Include window wells, under steps, foundation indentations, etc.	No (0) Yes (5)
TOTAL STRUCTURE HAZARD RATING	

Use best judgment in estimating these factors - actual measurements are not required.

HAZARD REDUCTION FACTORS: (choose all that apply)	Rating
SITE	
Trees pruned up 6 feet within 30' of the home	(-1)
Grass kept watered and short within 30' of the home	(-1)
Leaves/needles raked within 30 feet of the home	(-2)
3 feet of gravel or non-flammable material next to structure	(-3)
STRUCTURE	
Regularly cleaned roof and gutters	(-1)
Deck skirting non-flammable/screened behind to keep out debris	(-3)
OTHER	
Firefighting equipment available (hose, ladder, rake, etc.)	(-1)
Useable water supply nearby (pool, pond, hydrant, etc.)	(-3)
TOTAL HAZARD REDUCTION FACTORS (-)	

CALCULATING THE WILDFIRE HAZARD RATING

COUNTY HRVP RATING	SITE HAZARD RATING	STRUCTURE HAZARD RATING	HAZARD REDUCTION FACTORS	OVERALL WILDFIRE HAZARD RATING
				=

+ + -

County Ratings from WV Wildfire HRVP Project (Scale 1 to 5):	Note modifications to Hazard Ratings, recommendations, etc.
Berkeley (Extreme) [5]	
Grant (Extreme) [5]	
Hampshire (High) [3]	
Hardy (Very High) [4]	
Jefferson (Very High) [4]	
Mineral (Very High) [4]	
Morgan (Very High) [4]	
Pendleton (Moderate) [2]	
Pocahontas (High) [3]	
Tucker (Moderate) [2]	

What does the Wildfire Hazard Rating number mean?

Using the Wildfire Hazard Assessment, the highest possible rating is 150 points. Homes in the wildland/urban interface can be divided into the following four risk/hazard categories. The evaluator's judgment of this home's rating is indicated below:

Category	Total Wildfire Hazard Rating
LOW	Total Wildfire Hazard Rating 30 points or under
MODERATE	Total Wildfire Hazard Rating is 31 - 60 points
HIGH	Total Wildfire Hazard Rating is 61 - 90 points
VERY HIGH	Total Wildfire Hazard Rating is 91 - 120 points
EXTREME	Total Wildfire Hazard Rating is over 120 points

Evaluator Action(s):

Discussed results with homeowner/occupant
Firewise literature left at home
Other:

*Statewide Assessment on Wildfire Hazard, Risk, Value and Protection, WVDOP 2004.

Woodland Home Hazard Assessment form instructions

COMPLETING THE WOODLAND HOME WILDFIRE HAZARD ASSESSMENT FORM

WVDOF-FW-02-3 (Rev 09/06)

PROPERTY INFORMATION BLOCKS

Homeowner

Name/Address/Phone: Self-explanatory

Community Name/Location: Enter the name of the community (if applicable) and its geographic location

Evaluator Name(s): Enter the names of the personnel that completed this form

Occupancy Status: Enter whether Permanent, Seasonal, Weekend, Rental, etc.

Structure Type: Enter whether Single House, Multi (Condo), Storage, Garage, etc.

Evaluation Date: Self-explanatory

Property ID (Lot No.): Enter the Lot Number or Identifier, street address, etc.

County: Self-explanatory

Photo(s) Taken: Were there photos taken? If digital, write down the picture numbers

GPS Filename (if applicable): If collecting GPS data on this property, write down the filename or waypoint name

Datum Used: If collecting GPS data, indicate the Datum used (NAD 1927, NAD 1983, WGS 1984)

Latitude: If using Lat/Long, write down the Latitude in DD-MM-SS North format

Longitude: If using Lat/Long, write down the Longitude in DDD-MM-SS West format

Easting: If using UTM's, write down the Easting in 6-digit (XXXXXX E) format

Northing: If using UTM's, write down the Northing in 7-digit (XXXXXXXX N) format

HAZARD RATING SECTIONS OF THE FORM SHOULD BE EASY TO UNDERSTAND

One special note: Under the Structure Hazard Rating section, Exterior Walls:
If the home is made of brick, stone or metal, you may 'zero out'
this entire category if desirable

CALCULATING THE WILDFIRE HAZARD RATING (MANUALLY)

County HRVP Rating: Enter the number corresponding to the county you are in

Site Hazard Rating: Enter the number calculated from the category

Structure Hazard Rating: Enter the number calculated from the category

Hazard Reduction Factors: Enter the number to subtract for mitigation measures taken

Overall Wildfire Hazard Rating: The total of all categories, minus the reduction factor

CHECKING THE HAZARD RATING LEVEL

Checking the appropriate box next to the rating level based on the total score

Enter a check or "X" in the appropriate boxes indicating your actions

NOTES BOX

Use this block to make any notes regarding special items seen, recommendations for improvement, and any modifications you made to the scores (ex. Zeroed out the Structure Rating due to brick)

Creating a Waypoint and Finding It with the Garmin GPS 72 Receiver



IN THE CLASSROOM:

1. Turn the Garmin GPS 72 on by holding down the POWER key. (Looks like a light bulb.)
2. Press PAGE to agree with the warning.
3. Press and hold the ENTER/MARK key. You will see the Mark Waypoint Page.

Mark Waypoint	
■	001
28-JUN-05 12:43	
Location	
15 T 0486478	
UTM 4975805	
Elevation	Depth
1040'	-----'
<input checked="" type="checkbox"/> Show Name on Maps	
Goto	Map OK

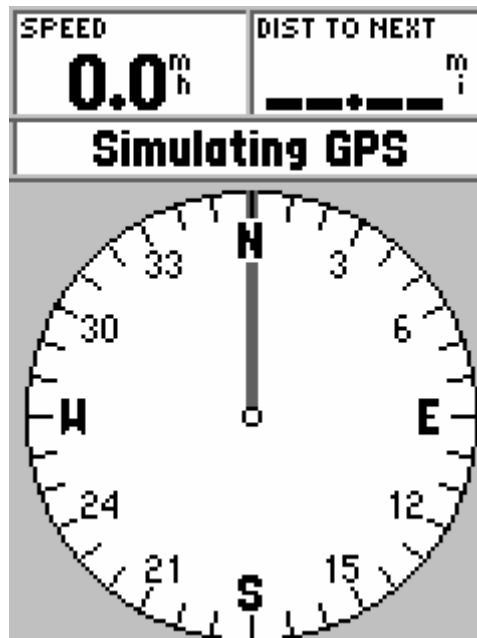
4. By default, the unit assigns a square as the symbol and a number as the name. You will also see the current date/time, a Location field (expressed as UTM coordinates), Elevation and Depth fields. The OK button will be highlighted.
5. Find your group's UTM coordinates on the Index card.
6. Use the ROCKER key (large circular key) to highlight the Location field and press ENTER. Use the ROCKER key to enter the UTM coordinates.
7. When you're finished entering the data, use the ROCKER key to highlight the OK button and press ENTER.
8. Turn off the Garmin GPS 72 by holding down the POWER key.

Firewise Communities: Reducing the Risk of Wildfire

Creating a Waypoint and Finding It with the Garmin GPS 72 Receiver (Continued)

OUTSIDE:

1. Turn on the Garmin GPS 72.
2. Press PAGE to agree with the warning.
3. Press the GOTO key.
4. Use the ROCKER key to highlight Waypoint and press ENTER.
5. Use the ROCKER key to highlight the Waypoint you created and press ENTER.
6. Press the PAGE key once to see the Map Page. You will see your waypoint on the map. To change the Zoom Scale, Press the IN or OUT keys.
7. Press the PAGE key again to see the Pointer Page, which has a Compass Ring. Use the Pointer Page to navigate to the waypoint. The Compass Ring is a graphic display of your current track. As you change direction, the Compass Ring will rotate, aligning your track with the vertical line. As you change direction, the Pointer will always point toward the active waypoint. When you are going directly toward the active waypoint, the Pointer is aligned with the vertical line in the Compass Ring.

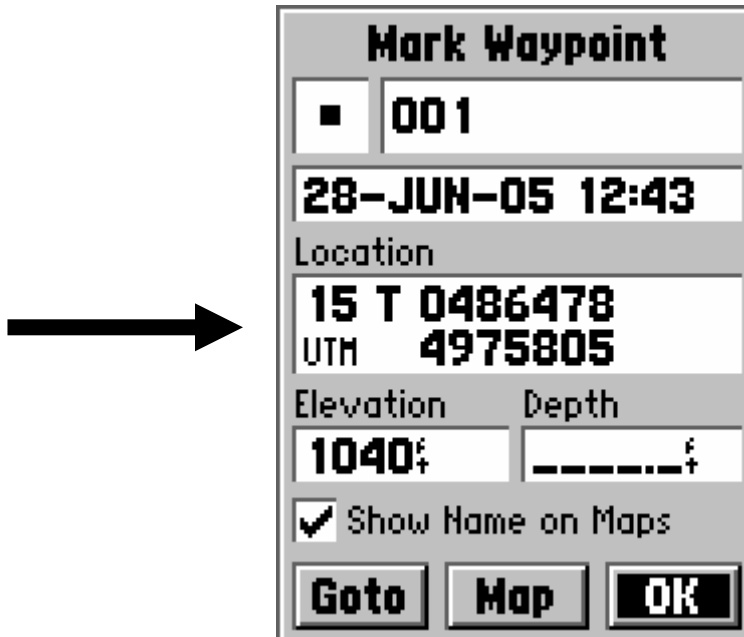


8. When you arrive at the waypoint, a message "Arriving at Destination" will be displayed. Look for the "treasure" with your group's number on it.
9. If you find another group's treasure accidentally, please put it back where you found it.
10. Turn off the Garmin GPS 72.
11. Return to the assigned meeting place with your treasure.

Using the Garmin GPS 72 Receiver in the Field - Student Edition



1. **TO TURN ON THE GARMIN GPS 72:** Press and hold the POWER key. (Looks like a light bulb.) Press PAGE to agree with the warning.
2. **DETERMINE A WAYPOINT:** You will see your location (expressed as UTM coordinates) at the bottom of the GPS Information Page. (Note: the image below is an example. You will have a different waypoint indicated.)
3. **RECORD A WAYPOINT:** Press and hold the MARK/ENTER key. This is the Mark Waypoint Page. Find the Location field. Record the waypoint number and its location on your Residential Hazard Assessment form.



4. **SAVE A WAYPOINT:** Use the ROCKER key to highlight OK, if necessary. Save the waypoint number and its coordinates by pressing the ENTER key.
5. **VIEW YOUR WAYPOINT LIST:** Press the MENU key twice to see the Main Menu. Use the ROCKER key to highlight Points and press ENTER. With Waypoints highlighted, press ENTER.
6. **TO TURN OFF:** Press and hold the POWER key.

Firewise Communities: Reducing the Risk of Wildfire