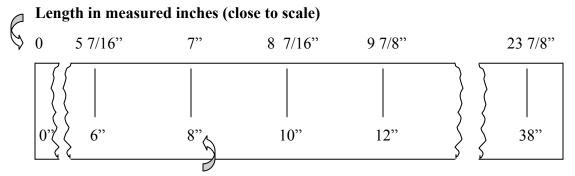
## **Building a Biltmore Stick**

At first glance, a Biltmore Stick may look like a yardstick, but a closer look will turn up major differences. You can, however, use a yardstick to make your own Biltmore Stick!

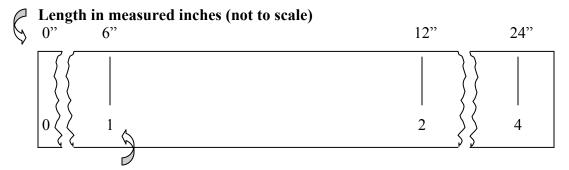
- **Step 1:** Cut two strips of paper that are large enough to cover the flat sides of the yardstick (approximately 2" by 36" in size).
- Step 2: On one strip of paper, measuring from the left end (which would be zero), make marks at the lengths listed below. Next to each of these marks, write the corresponding Biltmore equivalent number for tree diameter.



Biltmore equivalent (used to measure tree diameter)

Length Marks	<b>Biltmore Equivalent</b>
<u>5 and 7/16"</u>	6" in tree diameter
7	8
<u>8 and 7/16</u>	10
<u>9 and 7/8</u>	12
<u>11 and 3/16</u>	14
<u>12 and 7/16</u>	16
<u>13 and 11/16</u>	18
<u>14 and 7/8</u>	20
<u>16</u>	22
<u>17 and 1/16</u>	24
<u>18 and 1/8</u>	26
<u>19 and <math>\frac{1}{4}</math></u>	28
20 and 3/16	30
21 and 1/8	32
22 and 1/8	34
23	36
23 and 7/8	38

**Step 3:** On the second strip of paper, measuring from the left (zero) end, make marks at the lengths listed below. Next to each of these marks, write the corresponding Biltmore equivalent number.



Biltmore equivalent (used to estimate the number of 12' logs of timber that might be obtained from a tree)

Length Marks	Biltmore Equivalent
<u>6"</u>	$1 - 12' \log$
<u>12"</u>	$2 - 12' \log s$
18"	$3 - 12' \log s$
24"	$4 - 12' \log s$

Step 4: Tape or glue the two strips of paper onto different sides of the yardstick. You now have a Biltmore Stick very similar to the ones used by professional foresters. Go have fun measuring! (Don't forget to stand 50 feet away from the tree when you are measuring for the 12' logs.)

## **Chart for Determining Board Feet** of Lumber Within a Standing Tree

R	Tree	Diam	eter											
$\rightarrow$	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	34"	36"	38"
1 – 12'	20	40	60	80	110	140	180	230	280	330	390	450	520	590
log														
2 – 12'	40	70	110	150	200	250	320	400	470	560	670	770	880	1000
logs														
3 – 12'	50	90	150	210	270	360	460	560	670	790	930	1080	1270	1410
logs														
4 – 12'		110	180	250	340	450	570	700	840	990	1170	1350	1580	1780
logs														

(For example: A 20" diameter tree with 2 ½ - 12' logs would have approx. 235 board feet of lumber in it.)