

## Astoria, OR - Dec 1977

| Date |     | High  |     |          |      | Low   |     |       |      |  |      |    |
|------|-----|-------|-----|----------|------|-------|-----|-------|------|-------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|
|      |     | AM    | ft  | PM       | ft   | AM    | ft  | PM    | ft   | Rise                                                                                | Set  | Moon                                                                                  |
| 1    | Thu | 5:04  | 7.6 | 4:01     | 7.8  | 10:34 | 3.4 | 10:53 | 0.8  | 7:37                                                                                | 4:31 |    |
| 2    | Fri | 5:46  | 7.6 | 4:56     | 7.3  | 11:29 | 3.3 | 11:38 | 1.2  | 7:38                                                                                | 4:30 |    |
| 3    | Sat | 6:33  | 7.7 | 6:06     | 6.9  |       |     | 12:35 | 3.1  | 7:39                                                                                | 4:30 |    |
| 4    | Sun | 7:22  | 8.0 | 7:28     | 6.6  | 12:33 | 1.6 | 1:47  | 2.7  | 7:40                                                                                | 4:29 |    |
| 5    | Mon | 8:13  | 8.4 | 8:50     | 6.7  | 1:36  | 1.9 | 2:55  | 2.0  | 7:42                                                                                | 4:29 |    |
| 6    | Tue | 9:03  | 8.9 | 10:02    | 7.0  | 2:39  | 2.2 | 3:55  | 1.1  | 7:43                                                                                | 4:29 |    |
| 7    | Wed | 9:51  | 9.4 | 11:05    | 7.4  | 3:38  | 2.4 | 4:50  | 0.2  | 7:44                                                                                | 4:29 |    |
| 8    | Thu | 10:39 | 9.9 |          |      | 4:34  | 2.5 | 5:42  | -0.5 | 7:45                                                                                | 4:29 |    |
| 9    | Fri | 12:01 | 7.9 | 11:27 AM | 10.3 | 5:28  | 2.5 | 6:32  | -1.1 | 7:46                                                                                | 4:29 |    |
| 10   | Sat | 12:54 | 8.2 | 12:14    | 10.6 | 6:22  | 2.6 | 7:21  | -1.4 | 7:47                                                                                | 4:29 |    |
| 11   | Sun | 1:45  | 8.5 | 1:03     | 10.6 | 7:15  | 2.5 | 8:09  | -1.5 | 7:47                                                                                | 4:29 |    |
| 12   | Mon | 2:34  | 8.7 | 1:52     | 10.4 | 8:07  | 2.5 | 8:56  | -1.4 | 7:48                                                                                | 4:29 |    |
| 13   | Tue | 3:24  | 8.8 | 2:44     | 9.9  | 9:00  | 2.4 | 9:42  | -1.0 | 7:49                                                                                | 4:29 |   |
| 14   | Wed | 4:13  | 8.8 | 3:37     | 9.3  | 9:55  | 2.4 | 10:28 | -0.5 | 7:50                                                                                | 4:29 |  |
| 15   | Thu | 5:02  | 8.8 | 4:35     | 8.5  | 10:53 | 2.4 | 11:16 | 0.2  | 7:51                                                                                | 4:29 |  |
| 16   | Fri | 5:53  | 8.8 | 5:40     | 7.7  | 11:56 | 2.4 |       |      | 7:51                                                                                | 4:29 |  |
| 17   | Sat | 6:45  | 8.7 | 6:51     | 7.1  | 12:07 | 1.0 | 1:05  | 2.3  | 7:52                                                                                | 4:30 |  |
| 18   | Sun | 7:39  | 8.8 | 8:07     | 6.8  | 1:03  | 1.7 | 2:16  | 1.9  | 7:53                                                                                | 4:30 |  |
| 19   | Mon | 8:31  | 8.9 | 9:20     | 6.8  | 2:02  | 2.3 | 3:21  | 1.4  | 7:53                                                                                | 4:30 |  |
| 20   | Tue | 9:21  | 9.0 | 10:25    | 7.0  | 3:00  | 2.7 | 4:18  | 0.9  | 7:54                                                                                | 4:31 |  |
| 21   | Wed | 10:07 | 9.1 | 11:21    | 7.4  | 3:54  | 3.0 | 5:08  | 0.4  | 7:54                                                                                | 4:31 |  |
| 22   | Thu | 10:50 | 9.2 |          |      | 4:44  | 3.1 | 5:52  | 0.1  | 7:55                                                                                | 4:32 |  |
| 23   | Fri | 12:09 | 7.7 | 11:29 AM | 9.3  | 5:30  | 3.2 | 6:33  | -0.1 | 7:55                                                                                | 4:32 |  |
| 24   | Sat | 12:52 | 7.9 | 12:05    | 9.3  | 6:14  | 3.3 | 7:10  | -0.2 | 7:56                                                                                | 4:33 |  |
| 25   | Sun | 1:33  | 8.1 | 12:40    | 9.3  | 6:56  | 3.3 | 7:45  | -0.3 | 7:56                                                                                | 4:34 |  |
| 26   | Mon | 2:11  | 8.1 | 1:15     | 9.2  | 7:36  | 3.3 | 8:18  | -0.2 | 7:56                                                                                | 4:34 |  |
| 27   | Tue | 2:46  | 8.2 | 1:49     | 9.0  | 8:15  | 3.2 | 8:49  | -0.1 | 7:57                                                                                | 4:35 |  |
| 28   | Wed | 3:20  | 8.2 | 2:24     | 8.8  | 8:52  | 3.1 | 9:18  | 0.0  | 7:57                                                                                | 4:36 |  |
| 29   | Thu | 3:53  | 8.2 | 3:02     | 8.5  | 9:31  | 3.0 | 9:48  | 0.3  | 7:57                                                                                | 4:37 |  |
| 30   | Fri | 4:25  | 8.3 | 3:45     | 8.1  | 10:12 | 2.9 | 10:21 | 0.6  | 7:57                                                                                | 4:37 |  |
| 31   | Sat | 5:00  | 8.4 | 4:35     | 7.7  | 10:59 | 2.8 | 11:02 | 1.1  | 7:57                                                                                | 4:38 |  |