

Chapter 7

Maintenance

Log Homes Require Maintenance

Walk around the house once in the summer, preferably after a rain, and check to see that any rainwater that reaches the logs beads up on the finish rather than soaking in and that no log ends are receiving more than their share of any wind-blown rain. It is imperative to keep logs dry. Wet logs rot faster than most people realize. If water does not bead up on the surface of the logs, it is time to refinish. Any log ends sticking out too far should be chain-sawed off and refinished.

Check to make sure that the gutters are doing their job and that all rainwater flows rapidly away from the house. Also make an inspection tour around the house on a cold winter day. Look for frost crystals forming where warm, moist air is leaking out through the logs, condensing and freezing on the exterior. Take a photograph of any frost that you locate for future reference in the summer, which is the best time to do any caulking or sealing on the exterior of the logs.

Washing and Finishing the Logs

The exterior of the logs should be washed every one to five years as the effectiveness of the water-repellent preservative begins to fade. First rinse the logs with a pressure washer set at 400 or 500

pounds per square inch (psi). Do not hold the pressure sprayer on any spot for more than a few seconds since it could damage the surface of the wood and make it hard to finish. Then spray the logs with a solution of one gallon chlorine bleach, three gallons water (50-50 if logs are stained with mold), and a cup of trisodium phosphate mixed in a five-gallon garden sprayer.

Start at the bottom and work your way up, keeping the logs wet with the solution for about 30 minutes. Scrub dirty areas with a soft brush dipped in the bleach solution. Power wash thoroughly to remove all traces of the residues. If you don't have a pressure washer, a garden hose with a sprayer will work. Wear rubber gloves and protective eye glasses.

Allow to dry for several days before applying two coats of a water-repellent preservative that contains a pigment and ultraviolet (UV) inhibitor.

Find and Caulk the Leaks

Check again in the spring, looking for water stains that usually indicate leaks. Refer to the winter photos and go around the house, looking for moisture stains on the soffits and the top surface of the plate log that supports the roof. Look for water stains at the exterior of the notches for the ridge pole and purlins. These signs of leakage could be the result of warm moist

air leaking out at the ceiling/log interface or from liquid water running down from above. These sources can be reduced by caulking and sealing. Air leakage is best sealed on the inside. Wind-blown rain penetration can be reduced by well-maintained rain gutters, ample roof overhang, and a thorough caulking of the exterior joints and checks of any windward log walls.

Caulking and Sealing

After the passage of time, most log houses will require air sealing around log notches that have shrunk open or twisted enough to allow heated air to escape. Large checks or splits that connect to the outside should also be caulked to prevent heat loss and moisture migration that may condense in the cavity and begin to mold and cause the logs to rot. Large exterior checks in logs that can catch rain or blowing snow should also be sealed. Small cracks between logs can often be sealed with caulk alone. Larger cracks or splits should first be filled with triangular or trapezoidal backer rod to ensure a good seal with a minimum of caulking material. Backer rod comes in many sizes from 1/4" to 2" and greater and can be used to back up caulk around window and door installations as well as cracks in the logs. Use a caulk that remains

flexible and is compatible with the finish material on the logs.

Carpenter Ants

Signs of Infestation

The most obvious sign of infestation is the presence of ants inside the house. Ants are active all year if they are nesting in heated places; otherwise, they are inactive during cool weather. During the spring and early summer, there may be winged ants (swarmers) inside and around the house.

The presence of carpenter ants can be detected by piles of sawdust-like material (frass) expelled from cracks or slit-like openings made by the ants. This frass is often found in dark closets, attics, under porches, along sills, around the base of infested trees or elsewhere. Unused nest openings are sometimes sealed with wooden plugs. Carpenter ant frass can be distinguished from regular sawdust by the presence of fragments of ants and other insects mixed with wood fibers.

Damage

Damaged wood is discovered when its surface is broken open. The only external evidence of attack is the small, inconspicuous cracks and slit-like openings made in the surface by the ants. The galleries extend both along the grain of the wood and around the annual rings.

Gallery surfaces are smooth and clean; frass is completely removed except for occasional deposits in unused galleries.

All kinds of houses, from the newest to the oldest, located in rural areas or cities, become infested. In cities, the ants usually infest houses in wooded areas, but are sometimes found in crowded residential districts as well. Carpenter ants show some preference for moist, rotting wood around the foundations. Once a nest is established, the workers will extend the galleries into sound wood that is adjacent to the partially decayed portion.

Control Measures

The most difficult and most important part of carpenter ant control is locating the nest. Once the nest or

nests have been located, control is relatively easy. Simply treating the areas where ants are seen and not locating and treating the nests is seldom satisfactory.

The most obvious places to look for carpenter ants are in areas that are most likely to have a high moisture content. However, carpenter ants have been found nesting in virtually every part of the house. Edges of floors and ceilings and window and door trims should be carefully examined.

Once the nests are found, they should be treated with residual contact insecticides, such as Diazinon, applied as a dust or spray. Dusts are quite effective in the nests. **When using insecticides, follow all label directions exactly!**

(Carpenter Ants is from the Alaska Cooperative Extension brochure Carpenter Ants: Insect Pests of Wood Products, by Edward H. Holsten.)

Conclusion

Alaska has vast intact woodlands, capable of providing countless generations of people with meaningful and satisfying jobs in timber occupations. These high-paying jobs range from logging to cabinet-making to building our homes and offices with wood products made from sustainably grown, locally harvested and processed conifers and hardwoods.

The role of each generation is to pass on to our children the best

information and tools for living in this unique place on the planet that we call home. This book was written from the perspective that there are many ways of living long and well, wherever you are. Building with logs may be one of the best ways to stay safe, warm, and healthy in an affordable home that will last a hundred years or more with minimal maintenance.

Fairbanks Log House

At Alaskaland, at a few locations around town and out in the bush one sees log cabins all of a style sod roof on a low-pitched gable that extends out over the porch, the overall structure being rather low. Go to Nome or to other coastal towns in western Alaska and you will see a completely different style of architecture involving frame houses with glassed-in porches, usually facing the sea. These houses are reminiscent of the houses found in the old whaling villages of New England.

It seems likely that the Nome-style house had its genesis in the New England houses, but where did the Fairbanks-style log house come from? Travelers to Siberia, particularly in the regions around Irkutsk, will be struck by the similarity of the Fairbanks log house to the log cabins there. In the Siberian cities the log houses frequently have ornate painted window shutters and eaves but the style is unmistakable. To stroll through a country village today in Siberia is to stroll through Fairbanks 30 or 40 years ago; the houses are identical. It is not too farfetched to think that the Fairbanks log house had its origin in Siberia. Irkutsk used to be the effective capital of Alaska before Sitka was. Also the original wave of Russian influence was reinforced by a second wave of emigrants during gold rush days and up until the 1920s. Many Russians settled in interior Alaska and built log houses like those they lived in at home.

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