



Tree Times

MORGAN TREE SERVICE
THE "VITACARE" COMPANY

Recognizing and Combating Pine Bark Beetles



In these newsletters I have always tried to provide some answers and information about frequently encountered questions and issues arising over my last 34 years in what is commonly known by many as "the tree business."

One of those issues that periodically raises its ugly head is traumatic for pine trees as well as pine tree owners. Infestations of southern pine beetles and their sometimes equally destructive cousins can be not unlike a biblical plague when they invade host stands of large established pines. Very often these pines constitute important visual and noise privacy screening for a property. And while pines may not be the best choice for such screening, it's also true that you have what you have and you don't want to lose it.

Southern pine beetles, turpentine beetles, and ips beetles can all be implicated in the systematic decline and death of important stands of pine trees. However, maybe the most prevalent one in this area is the southern pine beetle (SPB), which also can be the vector for the equally destructive Blue Stain Fungus in 'host trees'. SPBs

are brown to black in color and about 3mm long. Initial SPB attacks usually occur from mid-trunk to the lower crown. After the first arrival, pheromone and weak host attractants draw in the mass attack not unlike a radio homing signal.

Trees weakened from other stress factors such as drought, lightning, mechanical wounding, etc. are prime targets. However, even otherwise healthy trees can be overcome by large seasonal invasions of beetles.

Healthy trees will usually put up a fight, attempting to repel the hostiles by "pitching out" the attackers with plugs of resinous gummy sap. Here the scenario becomes much like a medieval siege against the castle walls, a standoff in which the

outcome is uncertain.

In most cases and unless pitch tubes are present, the first generally recognized sign of trouble is a browning of the needles in the upper canopy of a tree. Unfortunately, by the time this becomes evident, the cow is usually out the gate and the only reasonable response then is containment of the spread. This is important because pine bark beetles, whether SPB, Turpentine, or ips, will march down a row of conifers like a firestorm, going from one tree to the next.

Sometimes traces of sawdust (frass) can be observed at the base of trees under attack. This residue can be the product of a secondary opportunistic pest called Ambrosia beetles. Therefore, as stated above, at this point the initial attackers

have probably moved on. Large numbers of SPB emergence holes, approximately 1/16th inch in diameter, can usually be found upon close inspection.

Containment is best implemented in two parts. First, the infected tree or trees, including stumps, must be cut down and removed. Beetles overwinter and lay their eggs in galleries in the wood tissue under the bark. If left, this nearby dead wood can be a launching pad for more damage. If trees are showing signs of partial or initial browning it is usually advisable to include them in the removal list since a reversal or 'cure' is possible but not likely.

Part two of the response is to treat adjacent still healthy (fully green) trees with an insecticidal treatment. Because different beetle species will initially attack different places on the trunk and/or

primary branches an overall spray application of all wood tissue may be safest and work best.



Pine Beetle pitch tubes



Pine Beetle galleries under bark



Southern Pine Beetle

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Good Tips When Hiring Tree Trimmers



Spring is here again. For most of us it's the time of 'coming back alive' and so it invites attention to a hundred different projects that may have been put off with winter's excuses. And every spring our trees come back into leaf and the deadwood that partly hid from us through the winter's gray drizzle becomes very visible again, sometimes not so subtly suggesting that preemption may be one key to disaster avoidance.

When you begin to think of shopping for needed tree work, there are a number of points to keep in mind. The list below is not comprehensive but is none-the-less useful.

- Your trees have value and need periodic pruning about every 3 –5 years. This first one is probably self-evident but you might be surprised how many folks just let it slide. Regular pruning and deadwooding prevents multiple problems that can sometimes become irreversible.
- Don't be entirely sold on the basis of the cost of the work alone. Compare apples and apples. Full service can sometimes cost more, but like most other things, you get what you pay for.
- To help ensure knowledge and a quality result, look for company memberships in national professional organizations and



supervisor/worker arborist certifications. Increasingly the International Society of Arboriculture's Certified Arborist credential is a mark of standardized training and quality.

- Be sure that liability insurance and workers' compensation are in place and adequate. Upon request, the salesman will have their insurance company send you a certificate via U.S.mail. It is not something 'the tree guy' keeps in his glove box.
- Except for removals and/or for emergency rescue use, do not allow crews to climb your trees with steel spikes on their feet. This wounds, defaces, and can also open entry or infection points for various subsequent problems.
- 25 % to 30% is a recommended limit on green foliage/bud removal in one growing season. Except in extraordinary circumstances, **do not** allow your trees to be 'topped'. Topping is NOT an accepted arboricultural practice. Aside from the stress aspect of removal of sugar producing leaf tissue, topping creates multiple additional problems, including abnormal form, rot points, and weak failure prone attachment of the re-growth. Another common

mistake is known as "lion-tailing", which is the practice of excessive interior pruning that gives the branches a heavily pruned "show poodle look." While many clients like this effect, making them believe that they got good return for their money, the practice tends to retard limb taper, thereby denying the progressive development of structural strength in the scaffold limbs.

- Ensure properly finished pruning cuts. There is a legitimate pruning target point just outside the limb collar. The limb collar itself is very often identified by a swollen point at the base of the limb where it joins the parent limb or trunk. **Cutting too close** makes a literal flush cut. This creates an excessively large wound that takes extra time to close and as well, removes a pathological barrier point that otherwise inhibits rot migration into the parent limb. **Cutting too far out** leaves a stub, which prevents wound closure and provides an entry point for decay. If made correctly, pruning cuts generally do not need to be painted with anything. 'Sealants' are generally ineffective and often retard or slow callus development and wound closure.
- Curb stacking is illegal and unprofessional. Professional contractors finish the job. Don't be taken in by the offer of 'a cheaper price' to leave debris on the curb. This could also be a tip-off for workers willing to take short cuts in others areas as well.

Did You Know . . .



. . . that **the root systems of your trees** in most cases extend far beyond . . . sometimes twice . . . what is usually identified as "the drip line." Also, those same root systems are surprisingly close to the top of the ground, especially in clay soil like we have here. This means that extra care and planning is needed and may be critical when contemplating any project or installation activity that requires digging, trenching, grade changes (reduction/cutting or filling/adding), or tilling. Little blond fibrous lacy filaments just a couple of inches under the surface are actually the terminal ends of your tree's lifeline. Sever those, scrape those or smash those and little or no water moves up your tree. Then a bit later the top(s) may begin to wilt or turn brown. "Fixing it" after the fact is not so easy.

. . . that our tall oaks are prime #1 candidates for warm weather **lightning strikes**. Large oaks are struck by lightning more than any other tree type **a.)** because of their size and height and **b.)** because they carry so much water aloft in their scaffolds and branches. Water is a prime attractant for electrical groundings. The extreme heat generated during a strike instantly boils the water in the tree's cambial structures and explodes it in the same way the top can be blown off a kettle over a fire. This also explains why most strike events create long vertical strips that run down the tree to the ground and may not splinter the interior wood of the tree. This can also fry those little roots hairs without a lot of visible damage. While not guaranteeing total protection, lightning protection systems installed correctly in large important trees can ground such a discharge and be a significant help in minimizing potential damage.

From My Journal: The Way We Were



I've been married to the same woman for thirty-nine years now. Over that time certain habits and preferences shared together fall inevitably into patterns that after some more time passes, begin to label you as a particular sort of couple. Becky and I are like that too. Almost everyone we know and those who know us know us as travelers. We've always spent the money we had and sometimes the money we didn't have on adventures. We did it before our three girls came along. We did it, although a little bit less, while they were here at home with us. And now that they are all married and gone, we're still doing it.

Maybe it helped that I married a girl who just like me dreamed of one thing: travel and going places. I separated from active duty in the Marine Corps in 1966, came home, started back to school and began dating a flight attendant who worked for Delta Airlines. They were called 'stewardesses' in those days. She's always told folks how she wanted to be a stewardess because it meant she'd get to travel and go to places that, at least back then, a lot of people still had never seen.

Two years later we married and the habit and the love that we shared never abated. I was going to school on the G.I. bill and working part-time at Sears. My wife was still flying. Sometime in the middle of any particular week I'd come in from work or from classes and we'd ask ourselves, 'What do we want to do on this long weekend?' How about a quick trip to San Francisco? And we'd do it. Free flight out and back! Half price hotels! Why not? With a little more time, we might fly off to Ocho Rios or Montego Bay.

And all of that was before airport security when the cabin crew seemed glad to have you aboard and they were still serv-

ing full meals on china in first class (where those available 'standby seats' were often located). It was before flying degenerated from an exotic adventure into a hassle about security and four ounce bottles and before half the passenger list came flopping aboard in cutoffs and flip-flops.

While I was in the military I learned to sail. I learned to love it, to love the spirit of it and the ideas and the beautiful metaphors it offers. So over time we not only got three beautiful daughters but I got a series of progressively bigger and better sailboats. Looking back, it seems

we'd spend half our time in the warm months at the lake. Many American families have a special place that they come to know as 'the lake'. For us it was Greers Ferry Lake in Arkansas. We'd go for weekends and holidays and many times rent a house there right on the water at Tannenbaum when we couldn't afford a more exotic vacation.

But our addiction also sent us on some very special trips. A week of scuba with a small German group at a little remote place called Stella Maris on Long Island, accessed only by a small private plane way down in the Bahama chain. And there were also three over-the-top trips to the British Virgin Islands where for a week each time we chartered a fifty foot sailboat in Tortola and struck out on our own. Those Caribbean sunsets, those steak dinners in the cockpit or being under full sail with Enya's Orinoco Flow and Caribbean Blue on the sound system, those dingy trips ashore at various island anchorages. You don't forget those; all indelible memories and stories that are still vivid and precious

today. I even wrote a couple of special and personal vignettes that were centered there; Sailing In Pirate Waters and Marina Cay.

Ever since our first trip to Europe years ago we've shunned itineraries and boarded trains with a Euro-rail pass and relative insouciance. One time we hopped off spontaneously just because we were a little tired of riding, but maybe more

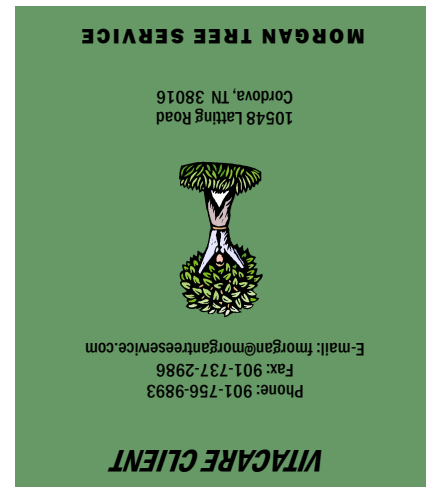
because of the magic of the soft Italian dusk outside our window and the lively community party that seemed to be going on in the little town square next to the station. We've rented bicycles in Bavaria and in Paris, where we've been mistaken for locals by Americans and Canadians asking us for directions. Scooters worked nicely in southern France and we were once robbed in Barcelona right outside the train station while searching for a room over a crowded Easter weekend. And we always made a point to virtually memorize Rick Steve's Europe On Five Dollars A Day. But five dollars a day sounds more like a joke now. Our kids don't believe it, even though for us back then that was also hard to really accomplish. It seems it always took more like twenty to thirty.

Lately we've been closely watching the slide of the dollar relative to the Euro and it scares us a bit because we wanted to go again this spring. I keep hearing all these horror stories from folks who just got back. The latest ratio reported was 1 to 1.57 and it's still moving in the wrong direction. Back in the days of francs and lira and marks, it was usually the other way round. But more than the ratio, I think I worry more about the worry itself. Where are these recent second thoughts and hesitations coming from? Does this mean we're finally 'getting old'? Now *there's* a scary thought.



Maybe it helped that I married a girl who just like me dreamed of one thing: travel and going places.





Newsletter Index

I was a little surprised to realize that I am now into my fourth year with this newsletter. This issue is the fourteenth successive quarterly issue. As I've looked back I've seen that in addition to having had a lot of fun with it and getting to share some other ideas as well, I've had opportunity to think and talk about a lot of arboricultural subjects. If you'd like an extra copy of a particular issue, let's us know.

Here's a brief topical index in chronological order:

Vol 1, Issue 1: Plant Growth Regulator benefits and use.

Vol 1, Issue 2: Gall in Oak Trees, Micro-Injection Options, Benefits of Soil Testing

Vol 1, Issue 3: Mycorrhizae Description and Benefits Summary, Woodpecker Damage

Vol 1, Issue 4: How Trees Work (HTW) Part I

Vol 2, Issue 1: HTW Part II, Construction Damage Mitigation, How Big? (Tree Moving)

Vol 2, Issue 2: Tree Borers, More on Soil Testing, Benefits and 'How To's' of Mulch

Vol 2, Issue 3: Pruning/Trimming Your Trees, Gall and Fungicidal Application Benefits

Vol 2, Issue 4: Diagnosing Plant Problems, Tree Planting Techniques

Vol 3, Issue 1: Three "Near Perfect" Products, Phomopsis on Juniper, etc.

Vol 3, Issue 2: Tree Risk Assessment, Lightning Strikes, Borer Prevention

Vol 3, Issue 3: Fire Blight, Girdling Roots, Spider Mites, Watering Your Trees

Vol 3, Issue 4: Hypoxylon Issues, Hardscape Conflicts, Digging/Trenching Near Trees

Vol 4, Issue 1: Trees and New Subdivisions, Oak Gall Again

Vol 4, Issue 2: Pine Borers, Tree Trimming Hiring Tips,

It Couldn't Be Done

Edgar Guest (1881-1959)

Somebody said that it couldn't be done, but he
with a chuckle replied

That "maybe it couldn't", but he would be one
who wouldn't say so till he tried.

So he buckled right in with a trace of a grin on his
face. If he worried he hid it.

He started to sing as he tackled the thing that
couldn't be done, and he did it.

Somebody scoffed: "Oh, you'll never do that; at

least no one ever has done it."

But he took off his coat and he took off his hat,
and the first thing we knew he'd begun it.

With a lift of his chin and a bit of a grin, without
any doubting or quiddit,

He started to sing as he tackled the thing that
couldn't be done, and he did it.

There are thousands to tell you it cannot be done,
there are thousands to prophesy failure;

There are thousands to point out to you one by
one the dangers that wait to assail you.

But just buckle in with a bit of a grin, just take off
you coat and go to it;

Just start in to sing as you tackle the thing that
"cannot be done", and you'll do it.

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