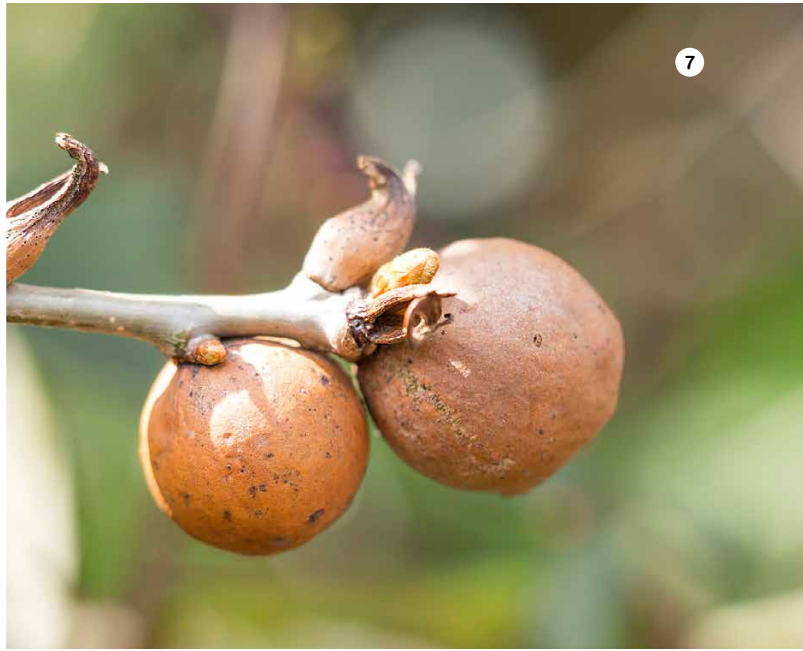


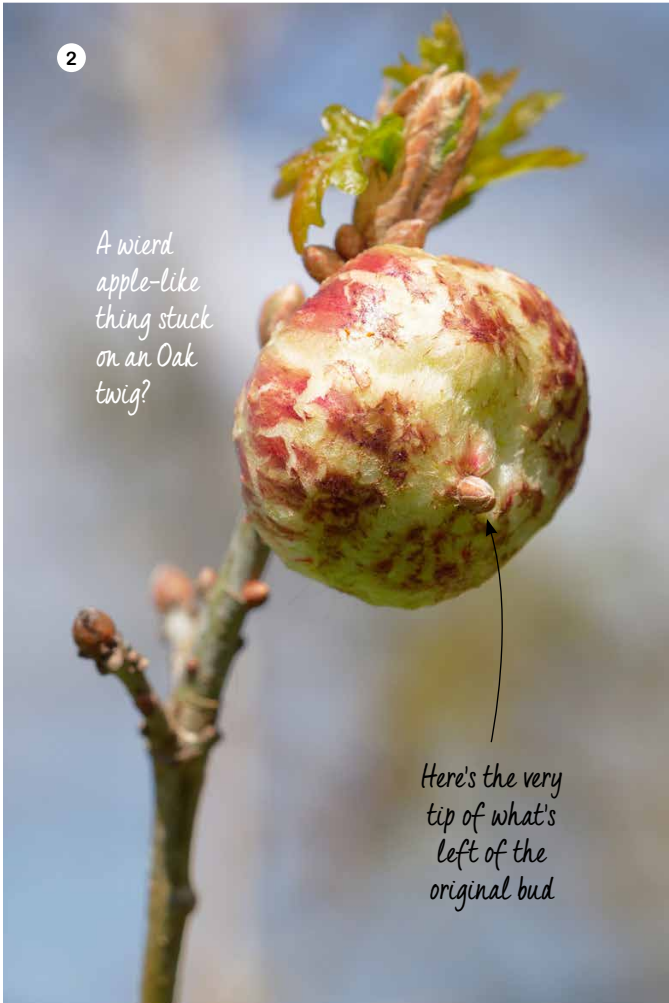


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Looking at:
Oak Apples



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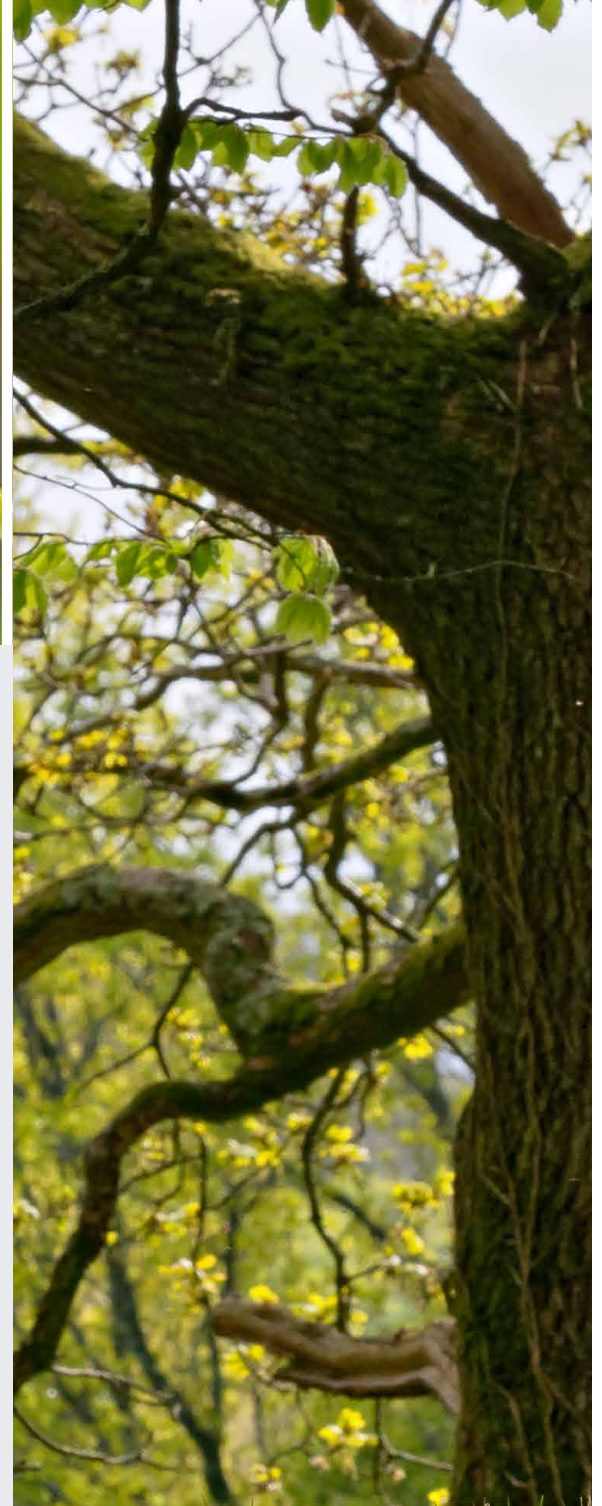
All is not what it seems out there in nature, I'd assumed that an oak apple was a deformed acorn.

Oak Galls which are otherwise known as Oak Apples are intriguing growths that I'd never really considered until very recently. I'd naturally assumed that oak apples were slightly different forms of acorns but not so, they are the result of a species of wasp using oak buds as rearing chambers for their offspring.

1. Oak catkins. Oaks trees are monoecious (hermaphrodite), bearing both male and female flowers, the female ones develop into acorns.
2. The beginnings of the oak apple, but it's not a deformed acorn, it's actually a deformed bud, you can just see the end of the bud in the photo.
3. An acorn still green and yet to drop to the ground as a seed. It takes an oak tree at least 40 years before it's ready

to bear acorns.

4. The culprit, an Oak Gall Wasp (*Biorhiza pallida*) which lays its eggs inside a leaf bud. You do wonder how long this natural association has taken to develop to this level. The gall wasp larvae injects chemicals that affect the structure of the bud.
5. The early season colour of oaks is syrupy yellow greens and bronzes.
6. Newly grown oak leaves, showing than unmistakable bronze tinge.
7. The oak apple (otherwise oak gall) has hardened and growth stopped. Incidentally, oak galls have been used in the production of ink since at least Roman times by combining gallotannic acid from the galls of oaks and other trees with iron sulfate. Once dried it is non-water soluble and could only be erased by scraping a thin layer off the vellum writing surface. Editor



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