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In this issue: Historical review of development of barrier protection systems for preserved wooden poles, by Professor Albin A W Baecker, pages 6 - 14

BIOMIMICRY FIGHTS POLE DECAY



Barrier Protection Systems or BPS combat the rot of preserved wooden poles in the ground. They are impervious flexible plastic sleeves fitted around the soil contact regions of poles before installation. Named BPS because they bar soil fungi from entering the wood while they also bar preservative loss to the soil, these sleeves were invented 20 years ago to address pole failure on a simple “prevention is better than cure” basis. Nowadays however BPS have come to exemplify the contemporary discipline of biomimicry because they provide dead utility poles with protective functions that bark conferred on them while they were tree trunks.

BPS publications over the past two decades have largely comprised results of individual field trials and laboratory tests conducted in various countries around the world but the history of BPS has never been written. The adoption of BPS by the American Wood Protection Association marks the two decade milestone of their scientific development as a timeous moment to address that discrepancy. Written by the inventor of the laminated plastic BPS the surprisingly long history of BPS employed in various other forms since medieval times is comprehensively reviewed for the first time. The review also illustrates a classical demographic feature of product development. The modern BPS was originally proven in South Africa but only first world countries have adopted its use.