Could biodiversity become the next inflation hedge?

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Real assets have moved back to the centre of institutional portfolios. After a decade in which financial holdings dominated asset allocation, investors are once again prioritising funds with physical underpinnings, long duration and the capacity to preserve real value through volatile market conditions. Timberland sits firmly within this universe and has historically been viewed as a reliable component of real asset portfolios due to its biological growth characteristics, supply discipline and long-term demand fundamentals.

From 1991-2024, timberland has delivered average returns of 9.1 per cent annually, outperforming commercial real estate, corporate bonds, gold, and even the FTSE All Share Index, with relatively low correlation to traditional asset classes. For many institutional investors the appeal has been straightforward: trees grow irrespective of financial market cycles, harvesting can be deferred in favourable price environments, and biological growth compounds asset value over time.

Performance differentiation within the timberland asset class increasingly reflects managers' ability to integrate climate and ecological considerations into operations and asset selection. These factors have evolved from long-term planning inputs to active components of portfolio management and operational strategy. Varying regional exposure to drought cycles, pest pressures, wildfire risk, and weather variability creates meaningful differences in asset-level outcomes. In this environment, inflation protection derives not only from price appreciation but from the biological resilience of well-managed timber stands, underscoring the importance of active stewardship and regional diversification.

This is where biodiversity comes in. Forests with high ecological integrity are not simply more diverse in species composition, they demonstrate functional characteristics that directly affect performance. Structural diversity, soil health, water quantity and quality and species interaction reduce the impact of external environmental stressors and improve resilience of forests. This translates into healthier, more durable forests with stable growth rates and faster recovery following disturbance events.

For real asset investors, this matters because inflation hedging depends on persistence of productive capacity. An asset that cannot sustain output under stress cannot perform its portfolio function. A forest with low ecosystem integrity, exposed to repeated biological shocks, becomes a source of drawdowns rather than a source of stability, regardless of historic return profiles.

The market is now evolving to better incorporate ecosystem integrity and biodiversity into asset-level descriptions. Historically, biodiversity assessment relied on qualitative metrics and high-level disclosures that, while valuable, lacked the comparability, repeatability and auditability that institutional investors require. Traditional approaches using satellite imagery and broad datasets provided important baseline information but were not designed to capture the ecological nuances within specific forest systems or address the distinct characteristics of different ecosystems. This has created an opportunity for institutional investors and asset managers to differentiate their portfolios by adopting measurement frameworks that can systematically identify genuinely resilient assets. With quantitative, auditable biodiversity data now becoming available, ecosystem integrity can be meaningfully reflected in underwriting assumptions, discount rates and risk premiums, unlocking both better risk management and value creation.

That dynamic is beginning to shift as investable biodiversity measurement becomes technically feasible.

The launch of a new Ecosystem Integrity Index (EII) by RMS allows investors to measure and track the functional condition of forest ecosystems using site-level data collected through a standardised, auditable methodology. It moves ecological quality from narrative into quantifiable signal.

Working alongside Nature Positive and RSK Wilding, two organisations with global experience developing ecological measurement systems, RMS designed the index specifically for working forests where trees are actively harvested and replanted for commercial timber production while supporting conservation objectives through practices like prescribed burning, wildlife habitat enhancements and protection of streamside areas. It translates ecological structure and function into standardised, auditable metrics that can be incorporated into financial analysis, while taking into account the needs and specificities of the ecosystems in the US South.

The EII allows investors to track ecological value alongside financial metrics. Investors can begin to integrate ecosystem integrity scores into acquisition screening and portfolio construction and monitoring. Assets demonstrating higher integrity can offer a lower risk profile and stronger assumptions around long-term productivity. Over time, buyers will increasingly differentiate between resilient and biologically fragile forest assets.

As physical climate risks intensify, biological resilience increasingly functions as operational infrastructure, determining an asset's ability to maintain productivity through disturbance events. At present, market pricing does not consistently reflect the performance differential between biologically resilient and fragile timberland assets during stress periods. For investors, this creates an opportunity to capture superior risk-adjusted returns by systematically evaluating ecosystem integrity as a predictor of operational continuity.

The question for investors is no longer whether timberland can act as a long-term hedge, but which timberland can. The EII provides the missing analytical layer to answer that question with data rather than assumption. It allows the asset class to move beyond broad classifications of sustainability and instead integrate ecosystem integrity directly into portfolio risk management.

Real assets are increasingly be judged not just by their yield, but by their ability to function under stress. For timberland investors, biodiversity, when measured with discipline and consistency, is emerging as a core indicator of that ability. The availability of tools such as the Ecosystem Integrity Index marks the point at which ecosystem health becomes a financial variable, and offers institutional investors a practical way to protect both value and mandate in an increasingly volatile real asset landscape.
