Distribution of sample libraries. (A) fungal and (B) prokaryotic communities.

S2 Fig. Distribution of sample libraries separated by time. (A) fungal and (B) prokaryotic communities.
S3 Fig. Rarefaction curves for both fungal and bacterial samples.
S4 Fig. Observed richness boxplots. Fungal (A) and prokaryotic (B) observed richness boxplots (n=3) in Experiment 1, Experiment 2, and Experiment 3 (See M&M for details). Red diamonds represent the mean of the sample distribution.

S5 Fig. Shannon index boxplots. Fungal (A) and prokaryotic (B) Shannon index boxplots (n=3) in Experiment 1, Experiment 2, and Experiment 3 (See M&M for details). Red diamonds represent the mean of the sample distribution.
S6 Fig. Changes in fungal species richness over time for DF (deciduous forest) soils in 
Exp1. Different models to describe rarefied richness variation with increasing storage time. 
Adjusted $R^2$ and AICc are reported.
S7 Fig. Changes in fungal species richness over time for DF (deciduous forest) soils in Exp2. Different models to describe rarefied richness variation with increasing storage time. Adjusted $R^2$ and AICc are reported.
S8 Fig. Changes in fungal species richness over time for PS (Populus stand) soils in Exp1. Different models to describe rarefied richness variation with increasing storage time. Adjusted $R^2$ and AICc are reported.
S9 Fig. Changes in prokaryotic species richness over time for DF (deciduous forest) soils in Exp1. Different models to describe rarefied richness variation with increasing storage time. Adjusted $R^2$ and AICc are reported.
S10 Fig. Changes in prokaryotic species richness over time for DF (deciduous forest) soils in Exp2. Different models to describe rarefied richness variation with increasing storage time. Adjusted $R^2$ and AICc are reported.
S11 Fig. Changes in prokaryotic species richness over time for PS (*Populus* stand) soils in Exp1. Different models to describe rarefied richness variation with increasing storage time. Adjusted $R^2$ and AICc are reported.
diagrams for ITS and 16S NMDS graphs reported in Fig 3. The plot shows ordinations distances against original dissimilarities. Non-metric fit is based on stress value of the NMDS ordination and calculated as $R^2 = 1 - S*S$. Linear fit is the squared correlation between fitted values and ordination distances.

Boxplots of Distance from centroids to assess for homogeneity of group variances (function “betadisper” in vegan R package). (A) fungi year, (B) fungi habitat, (C) prokaryotes year, and (D) prokaryotes habitat. Permutational ANOVA (perm. 999) was used to assess significant differences at $p=0.05$. 
S14 Fig. Canonical analysis of principal coordinates (CAP) constrained ordinations. Exp2 fungal (A), Exp2 prokaryotic (B), Exp 3 for fungal (C) and Exp3 prokaryotic (D) communities ordination graphs.
S15 Fig. Heatmap of relative abundance and OTU richness of all the prokaryotic classes. The plot shows all taxa found DF (deciduous forest) and PS (Populus stand) soils according to the Exp1 dataset after different year of storage. Taxon relative abundance was square root transformed to improved visibility.
S16 Fig. Number of fungal colonies developed from DF (deciduous forest) and PS (Populus stand) soils. Colonies were counted 3 times over a 10 days' time period.
S2 Table. List of sequence Isolates obtained from the oldest soils which showed growing colonies. Isolates name, sequence ID, Length, Query Coverage, Identity %, Genbank ID, Habitat, Year, Culture Media (modified Melin-Norkrans or Potato Dextrose Agar), Taxonomy (GenBank), MiSeq OTU match (OTU name in the MiSeq data), Read N. (Number), are reported.

| Isolate name | sequence ID | Length | Query coverage | Identity % | Genbank ID | Habitat | Year | Culture Media | Taxonomy (GenBank) | MiSeq OTU match | Read N. |
|-------------|-------------|--------|----------------|------------|------------|---------|------|----------------|-------------------|----------------|---------|
| PS1_2000M-1 | MH027189    | 638    | 100            | 99         | JN899355   | PS      | 2000 | MMN | Talaromyces ohiensis | OTU_266 | 883     |
| PS1_2000M-2 | MH027190    | 637    | 100            | 99         | JN899355   | PS      | 2000 | MMN | Talaromyces ohiensis | OTU_266 | 883     |
| PS1_1995M-3 | MH027195    | 700    | 100            | 99         | JN899355   | PS      | 1995 | MMN | Talaromyces ohiensis | OTU_266 | 883     |
| PS2_2000M-1 | MH027196    | 727    | 100            | 99         | JN899355   | PS      | 2000 | MMN | Talaromyces ohiensis | OTU_266 | 883     |
| PS2_1995M-1 | MH027201    | 745    | 98             | 99         | JN899355   | PS      | 1995 | MMN | Talaromyces ohiensis | OTU_266 | 883     |
| PS2_2000P-1 | MH027199    | 759    | 98             | 99         | JN899355   | PS      | 2000 | PDA | Talaromyces ohiensis | OTU_266 | 883     |
| PS2_2000M-2 | MH027197    | 719    | 100            | 99         | JN899395   | PS      | 2000 | MMN | Talaromyces flavus   | OTU_270 | 1040    |
| PS2_2000M-3 | MH027198    | 708    | 100            | 99         | JN899395   | PS      | 2000 | MMN | Talaromyces flavus   | OTU_270 | 1040    |
| PS2_1995M-2 | MH027202    | 744    | 100            | 100        | KX869965   | PS      | 1995 | MMN | Epicoccum nigrum   | OTU_409 | 534     |
| PS1_2000M-3 | MH027191    | 597    | 100            | 99         | KY316389   | PS      | 2000 | MMN | Paecilomyces tenuis | OTU_989  | 73      |
| PS3_2000P-1 | MH027203    | 677    | 98             | 99         | LC317798   | PS      | 2000 | PDA | Talaromyces trachyspermus | OTU_989  | 73      |
| PS3_1995M-1 | MH027204    | 657    | 98             | 99         | LC317798   | PS      | 1995 | MMN | Talaromyces trachyspermus | OTU_989  | 73      |
| PS1_2000P-1 | MH027192    | 668    | 100            | 99         | KY316389   | PS      | 2000 | PDA | Paecilomyces tenuis | OTU_3342 | 54      |
| PS1_2000P-2 | MH027193    | 698    | 99             | 99         | KX621968   | PS      | 2000 | PDA | Paecilomyces tenuis | OTU_3342 | 54      |
| PS1_1995M-1 | MH027194    | 698    | 99             | 99         | KX621968   | PS      | 1995 | MMN | Paecilomyces tenuis | OTU_3342 | 54      |
| PS2_2000P-2 | MH027200    | 689    | 100            | 99         | KX621968   | PS      | 2000 | PDA | Paecilomyces tenuis | OTU_3342 | 54      |
| PS3_1995P-1 | MH027205    | 684    | 100            | 99         | KX621968   | PS      | 1995 | PDA | Paecilomyces tenuis | OTU_3342 | 54      |
| PS3_1995P-2 | MH027206    | 764    | 100            | 99         | KX621968   | PS      | 1995 | PDA | Paecilomyces tenuis | OTU_3342 | 54      |
| DF2_2010P-1 | MH027207    | 616    | 99             | 99         | FR839983   | DF      | 2010 | RBA | Auxarthron umbrinum | OTU_903  | 824     |
