Abstract
We measured legacies in modern landscapes that originated from three separate time periods, the study was conducted in central Sweden. In several locations repeatedly sampled agricultural fields are present and no overlapping on local landscapes allowing us to measure the rate of successional processes through the last 4,000 years. Farming has interrupted the landscapes in the study area since the Bronze Age (2500—500 BC) through the Iron Age (500 BC—AD 500) and into the early 1900’s. In this study we include agricultural fields from the Bronze, Iron and Medieval Periods. Analysis of plant communities on fields from each of these times shows that legacies collected in plant community compositions and cover persist on all of the fields. Fields from different time periods show different types of legacies. These may be due to age differences or that different farming techniques in the various periods produced different types of legacies that have persisted through time.

Location
The current study is located north of the Stockholm City center on the property of the Northern Djurgården 2003. The study area is the northwest portion of the former Djurgården bounded on the south by Lake Laduviken. Numerous small hills and two low valleys, the Laduviken Valley and the Lappkarrs Valley, dominate this area. The exposure of land by the melting ice and the subsequent rising of the land from the sea are the two major factors that have influenced the history of this landscape.

The topography of the park is typical of the surrounding region with areas of exposed glacially smoothed bedrock with low areas filled with silts and clay surrounding the exposed bedrock.

History
The earliest remaining visible evidence for human activities in the northern Djurgården date to the Bronze Age (2500—500 BC). Numerous fields and large grave mounds from this period dot the modern landscape. The early Iron Age (500 BC—AD 500) has a few visible remains in the area including several stone structures dating to circa 100 AD. Quite a few remains exist from the late Iron Age (500—1100 AD), a period that includes the Viking Age. Remains from this period include fields, houses and the remains of stone piers. Many remains including fields and some structures are present on the landscape dating from the Medieval Period and later.

Methods
Data were collected during the summer of 2004. Old fields were identified in the northern Djurgården by surveys conducted on foot through the area and consultation with old maps made available through the Royal Archives. Bronze Age fields were located higher on hill-slopes and were round, basin-shaped terraces while Medieval Period fields are located lower on the slopes and are rectangular in construction. Once field were identified, a series of ten 50cm x 50cm quadrats were located randomly on the individual fields. A corresponding number of 50cm x 50cm quadrats were then randomly located in off-field locations. Each quadrat was divided into quarters. In one quarter all plants present were counted by and the number of each individual of each species was recorded. In all four quadrats the cover of each species present was recorded as percent cover of quadrats. The cover of each species present was recorded as percent cover of quadrats.

Results
- Old and more recent fields have left legacies detectable in the plants
- Differential legacies have resulted from different ages and field-building techniques
- Human-driven disturbance regimes can have impacts on landscape pattern dynamics that may persist long after the disturbed landscape would be expected to have returned to “normal”.
- Human activities create patches on the landscape that can fragment landscapes for thousands of years.