

Morning Has Broken



Bird Strike Committee USA




The Legacy of Jim Forbes: Conception and Success of BSC-USA

Memphis, Tennessee 14 August 2012



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SILENT SPRING

The CLASSIC *that* LAUNCHED
the ENVIRONMENTAL MOVEMENT

RACHEL
CARSON



Published, 1962



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25 June 1969, Cleveland, Ohio



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**25 June 1969, Cuyahoga River,
Cleveland, Ohio**



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1962: Silent Spring

1969: Cuyahoga River burns



- 1970 – Earth Day (Sen. Gaylord Nelson)
- 1970 – Environmental Protection Agency
- 1970 – Clean Air Act
- 1971 – National Wildlife Refuge System expanded
- 1972 – Clean Water Act
- 1972 – Migratory Bird Treaty Act expanded
- 1972 – DDT banned by EPA
- 1972 – Marine Protection & Sanctuaries Act
- 1973 – Endangered Species Act



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1970s -1980s



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Convair 880 "Lisa Marie" 1975



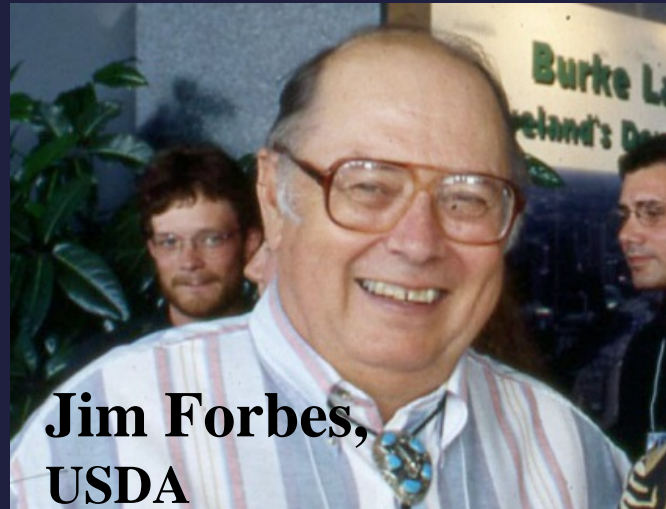
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Aug 1991: Founding of Bird Strike Committee-USA

FAA Technical Center, Atlantic City Intl Airport



Vince Cimino, FAA



**Jim Forbes,
USDA**



Tom Hupf, FAA



Maj. Ron Merritt, USAF



Gene LeBoeuf, FAA

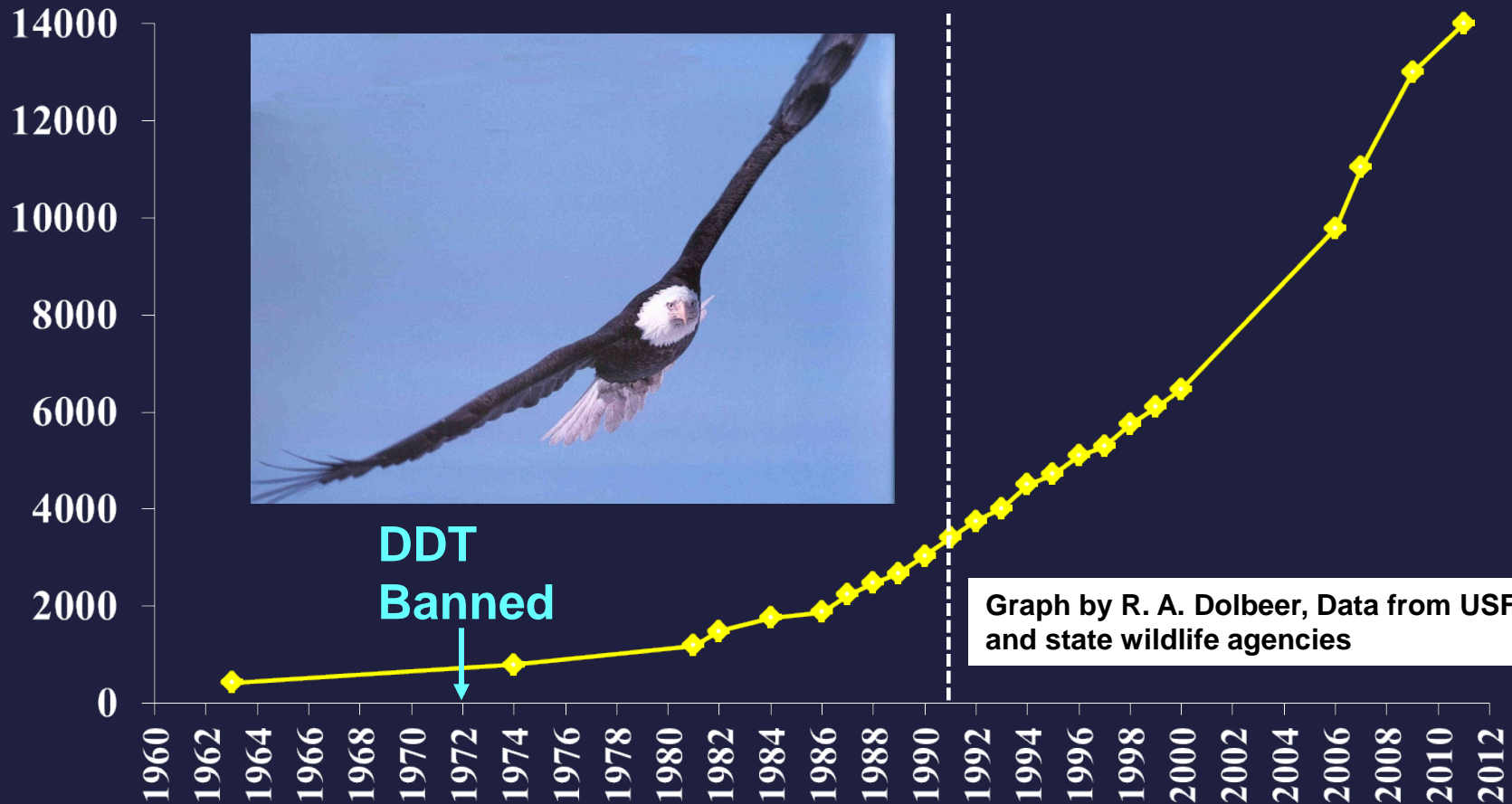


Janet Bucknall, USDA



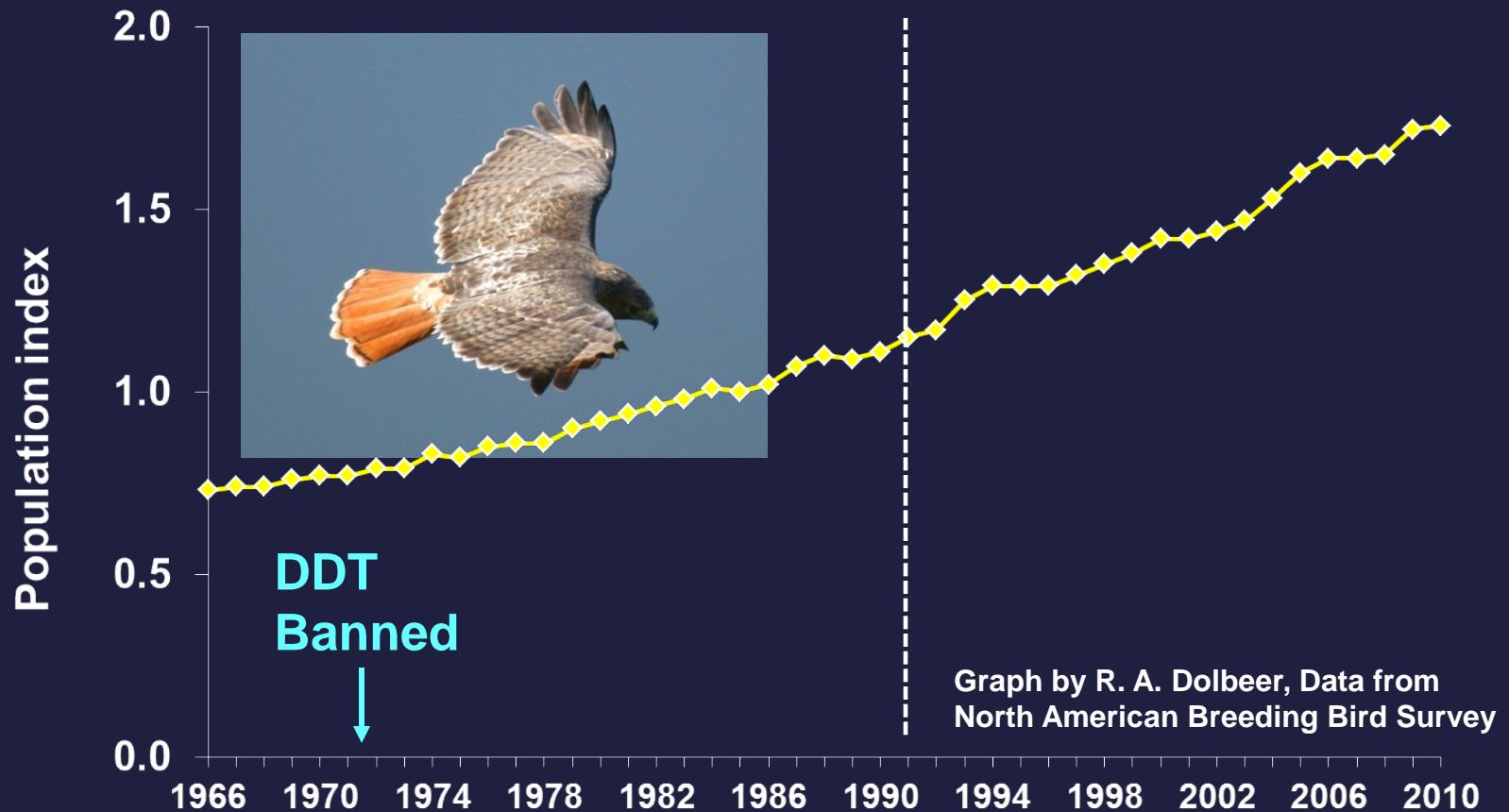
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Bald Eagle nests in contiguous USA increased 8 fold from 400 to 3,400, 1963 – 1991, and another 4 fold to >14,000, 1991-2011



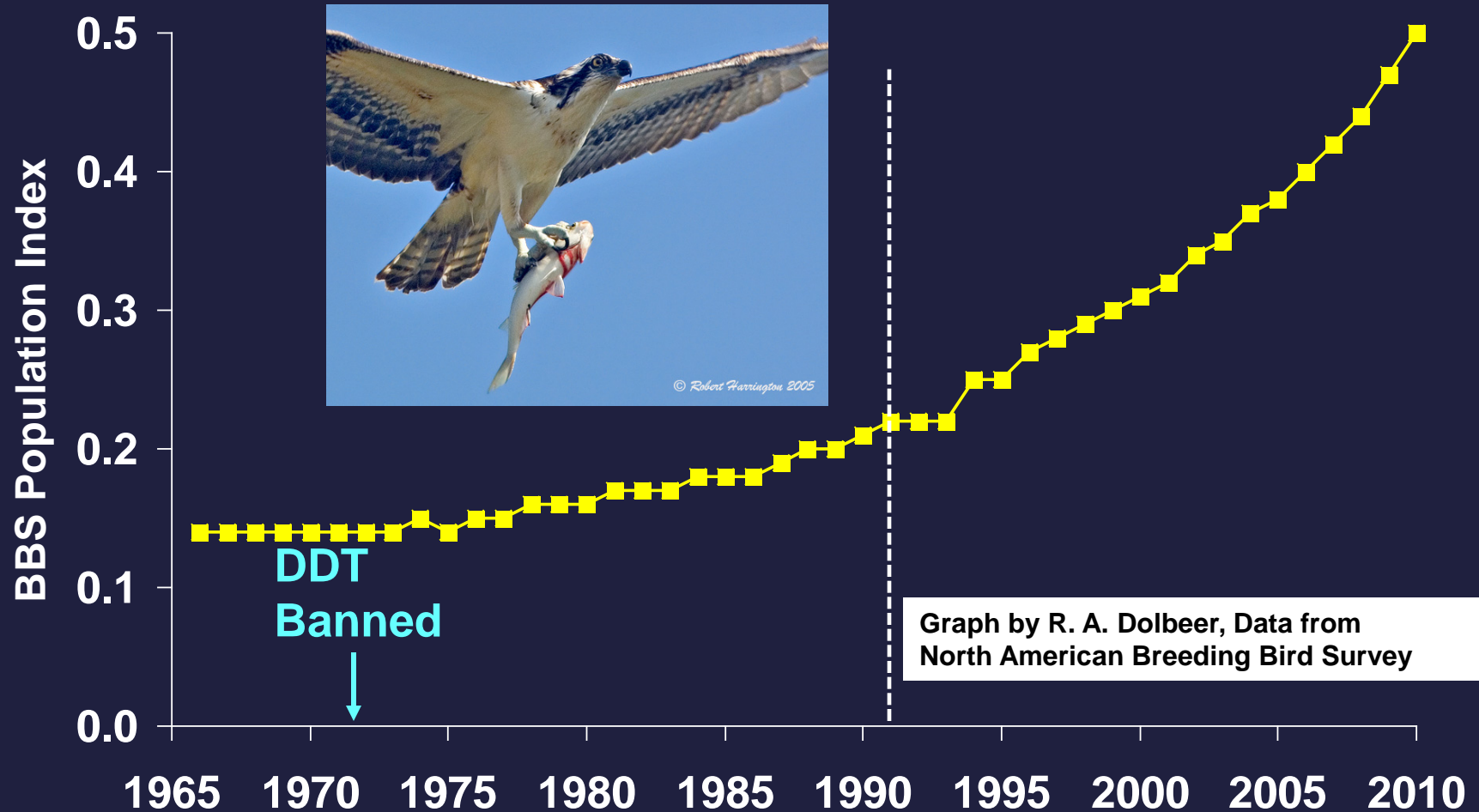
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Population of Red-tailed Hawks increased 50% in USA from 1966–1991; and another 60%, 1991-2010.

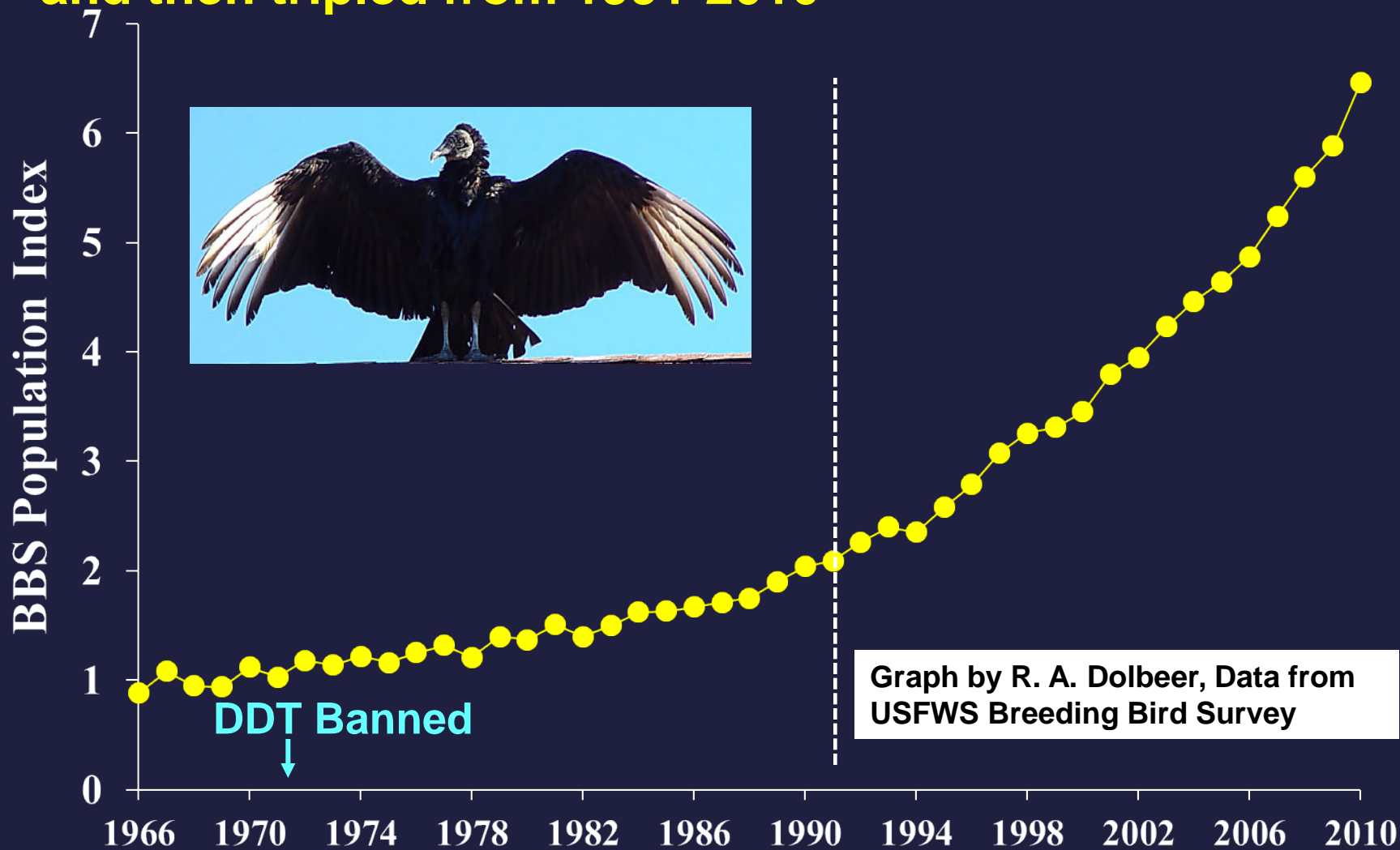


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Breeding Population of Ospreys increased 50% in USA, 1966-1991; and another 150%, 1991-2010

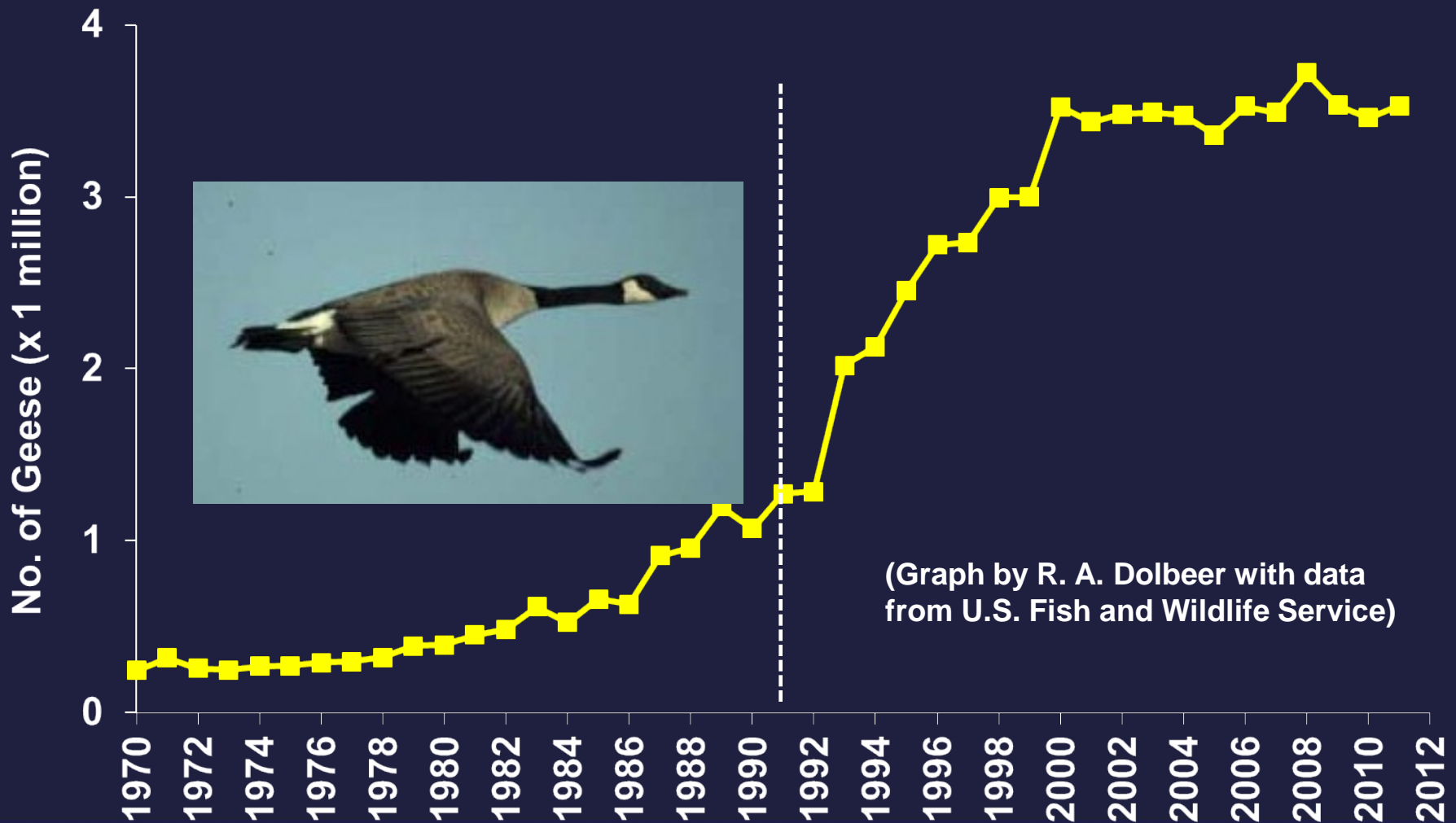


Black vulture population doubled in USA, 1966-1991; and then tripled from 1991-2010



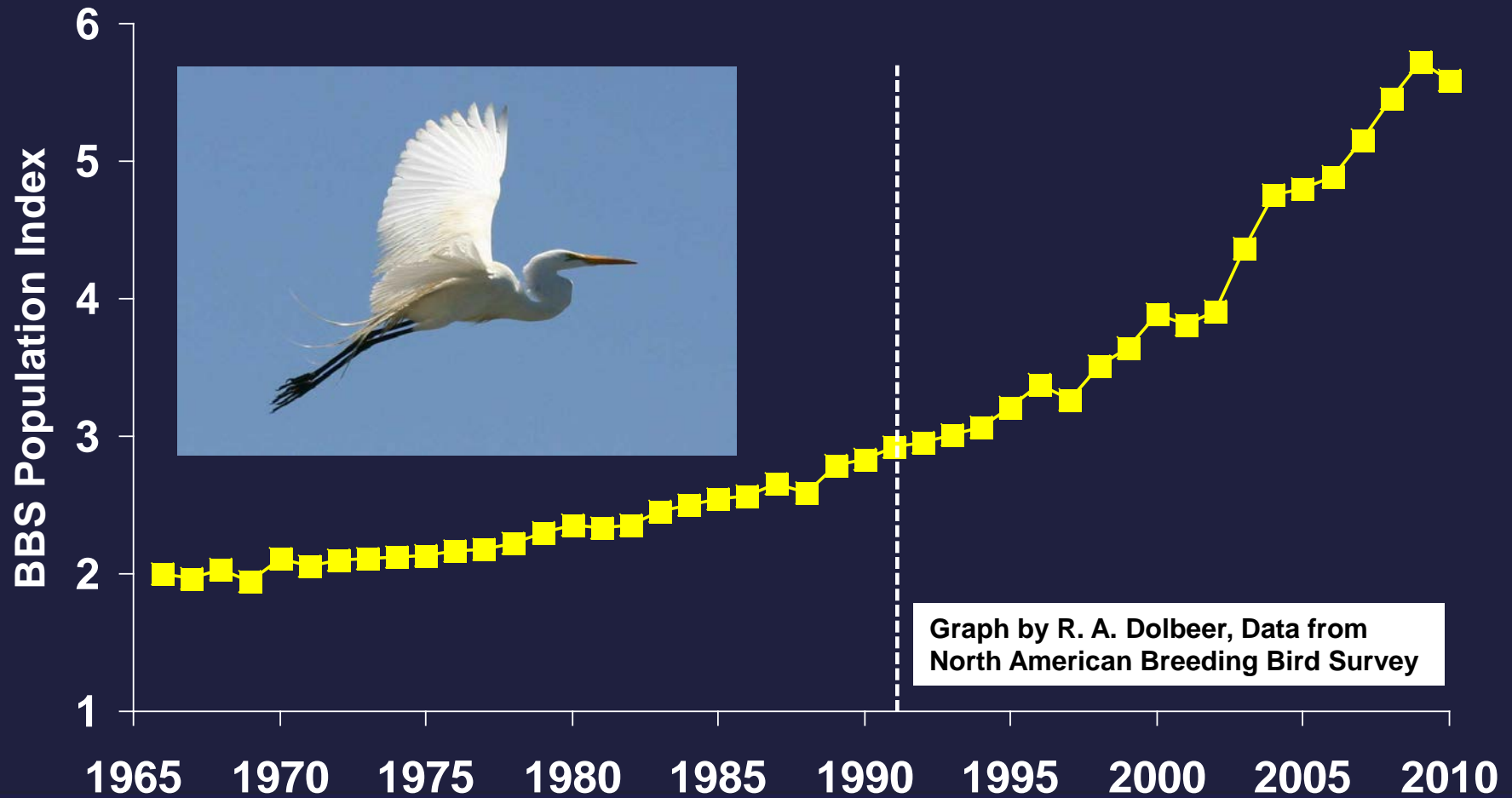
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Resident Canada Goose population in NA increased from about 200,000 in 1970 to 1 million in 1991 and to 3.5 million in 2000-2011



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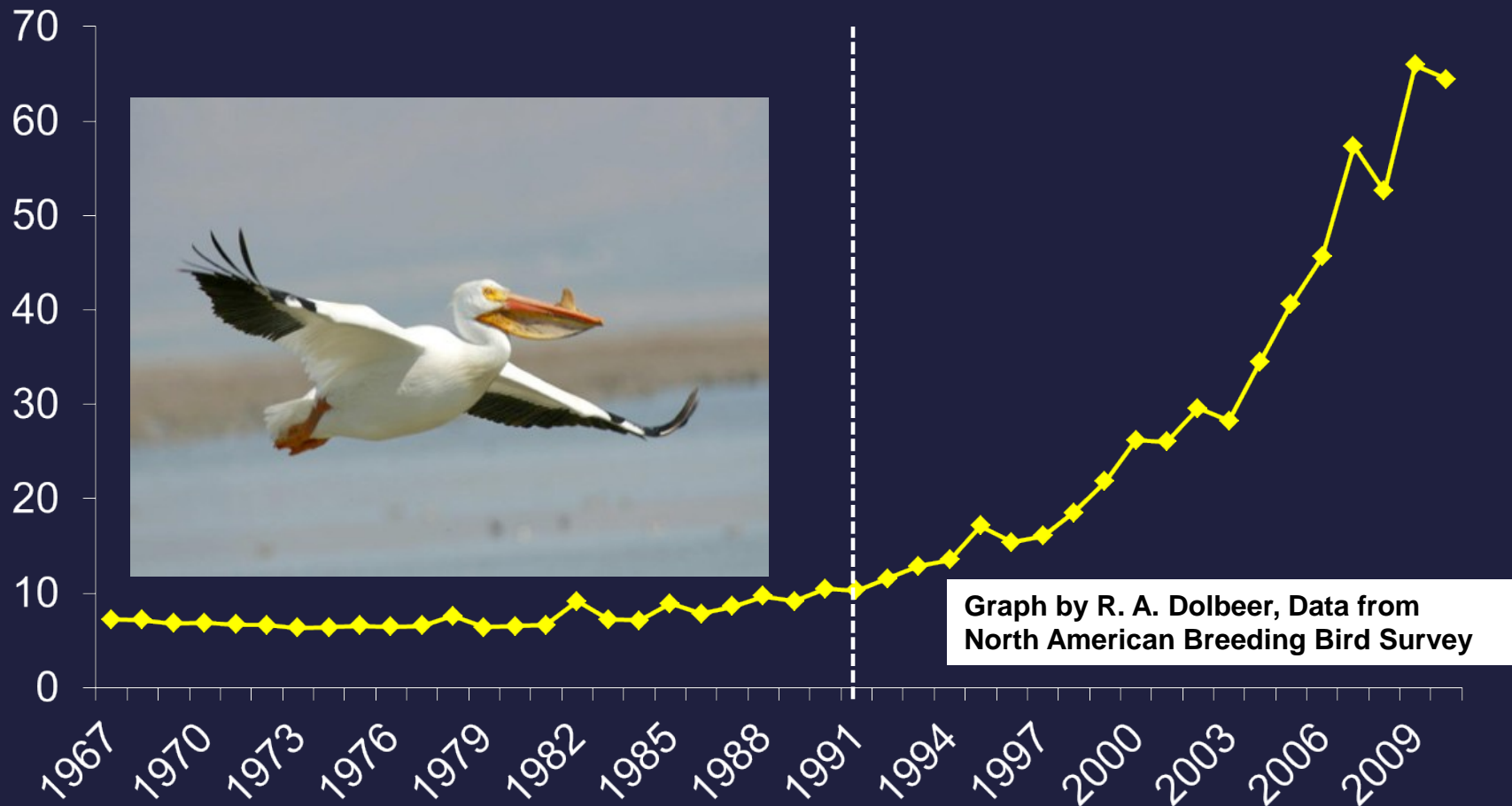
Breeding Population of Great Egrets increased by 40%, 1966-1991; and then doubled, 1991-2010



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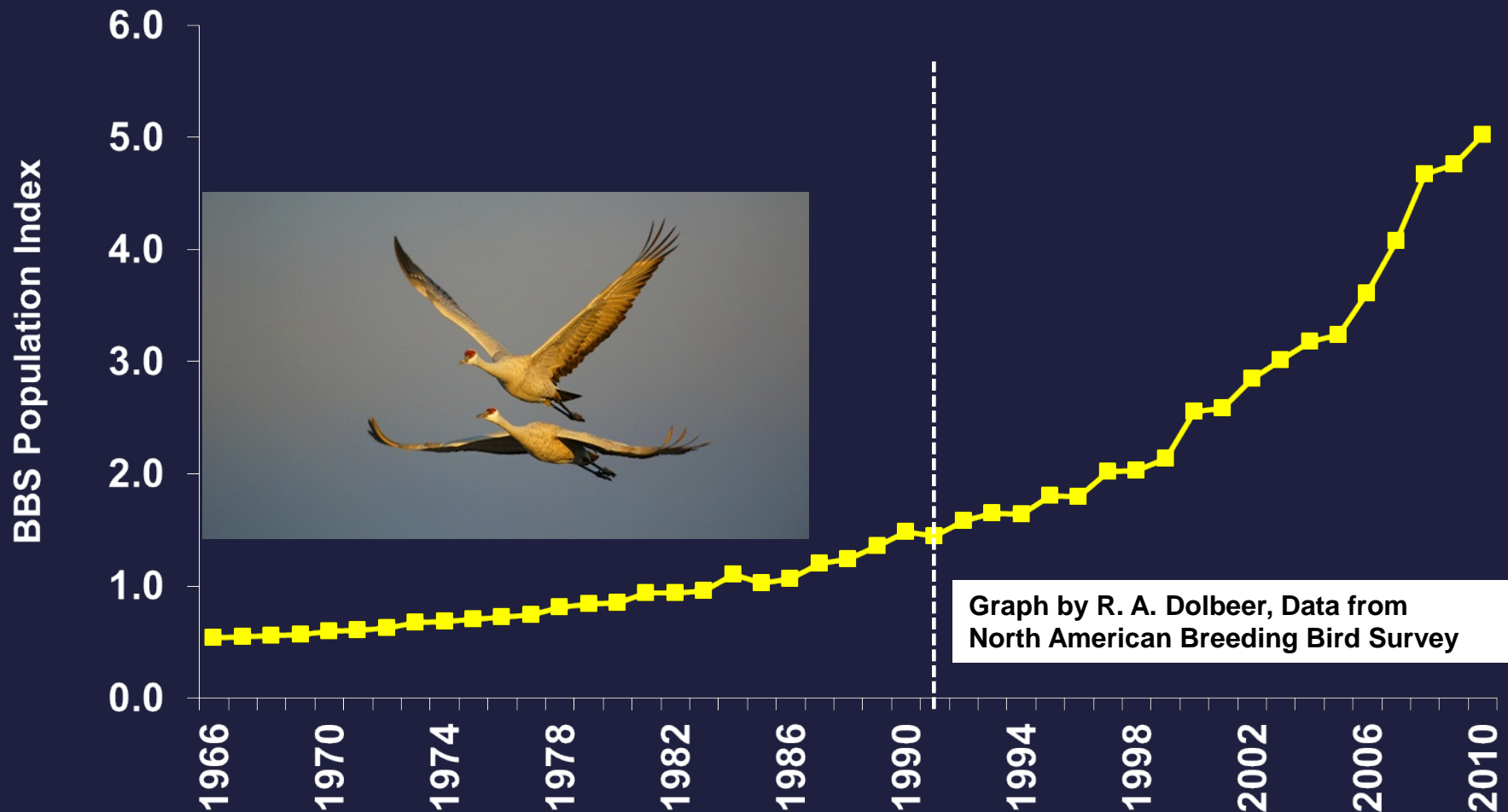
Breeding population of White Pelicans remained stable in NA, 1967-1991; then increased over 6 fold, 1991-2010



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Breeding Population of Sandhill Cranes doubled in NA, 1966-1991; then increased 5 fold, 1991-2010



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Aug-12 USDA/WS



ORD 1994



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PHX 1996



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DFW 1995



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BKL 1998



Bird Strike Committee USA



DFW 1995



Bird Strike Committee USA



DFW 1995



BKL 1998



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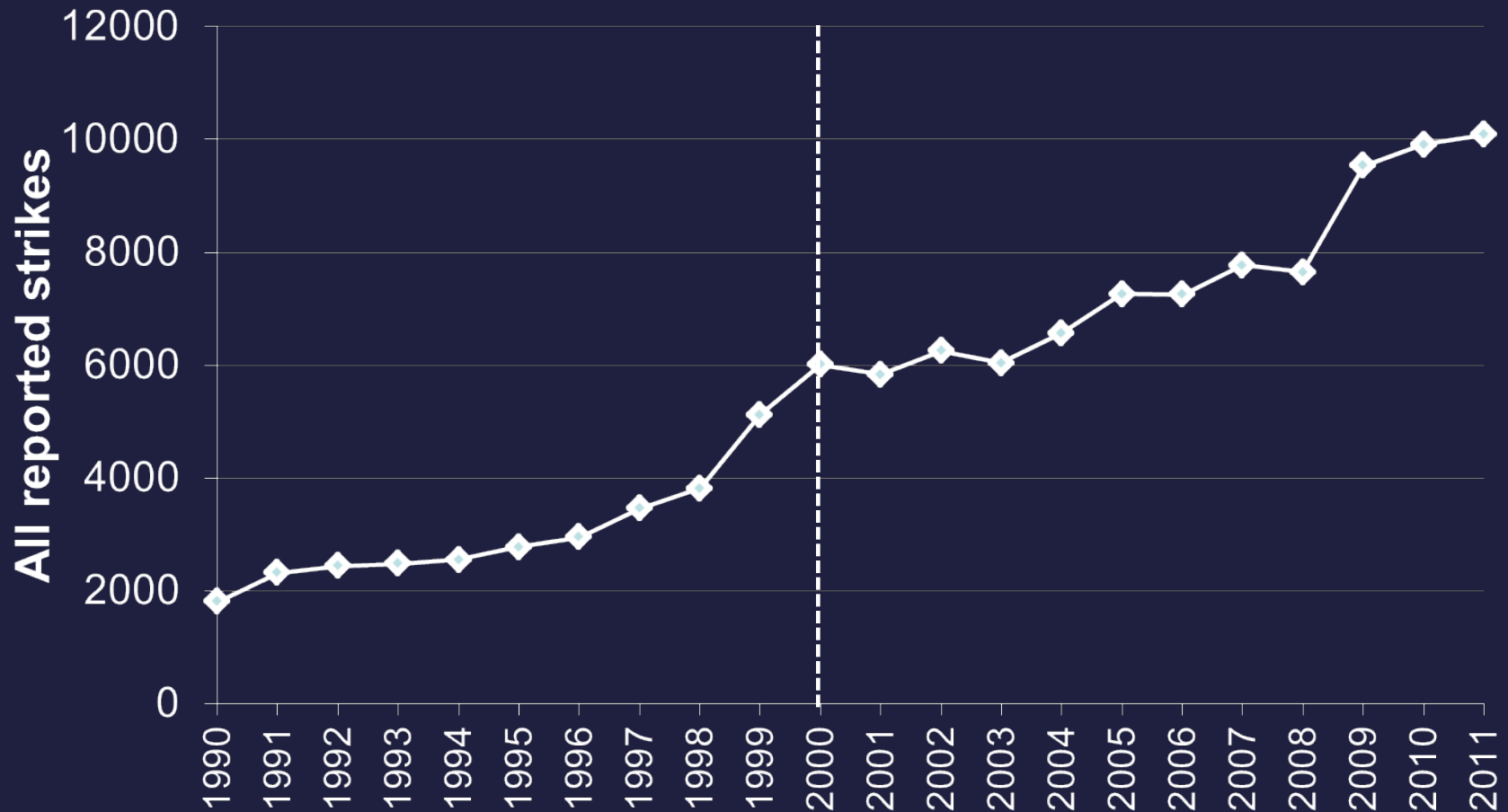


DFW 1995



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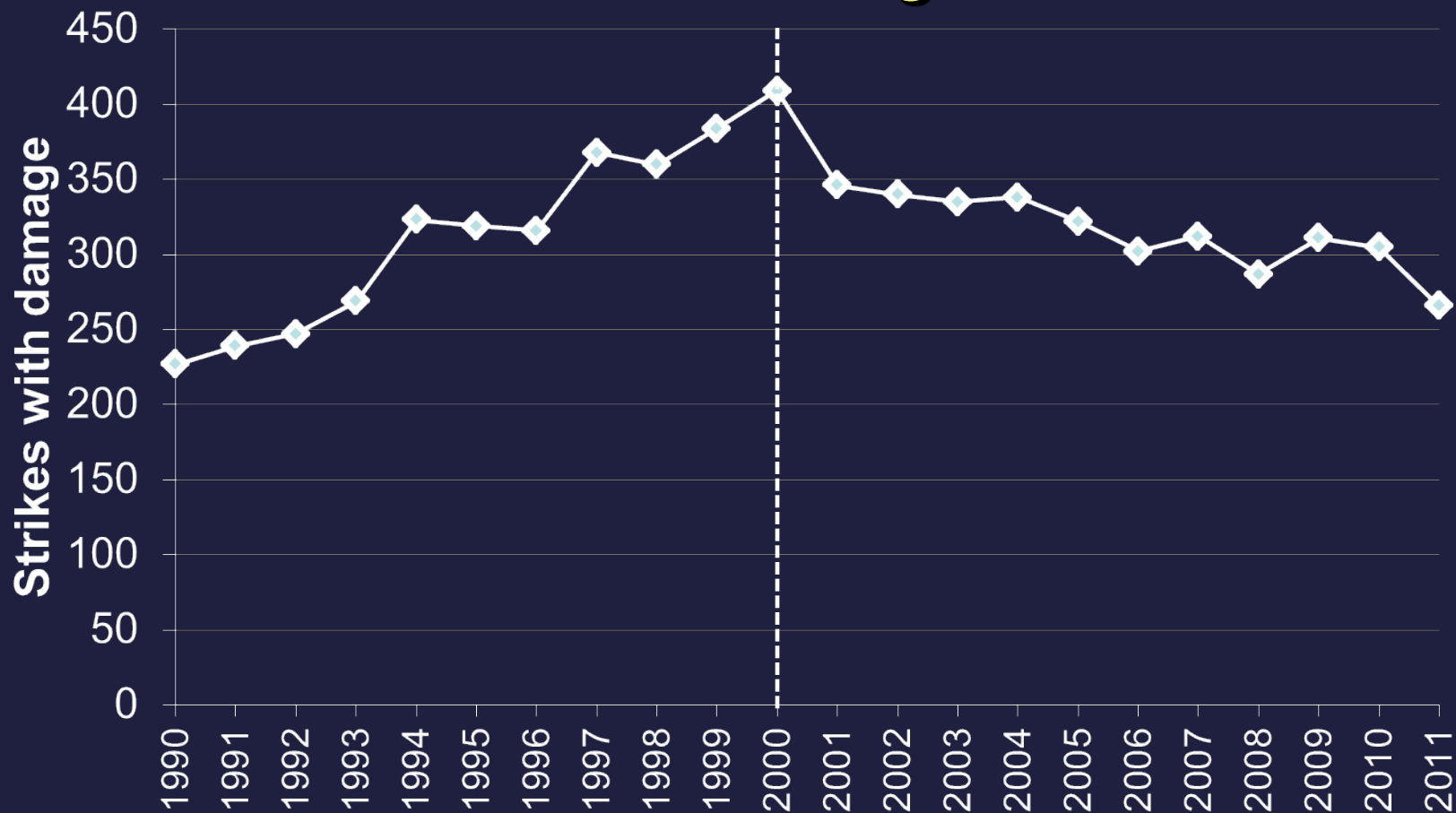
Reported strikes to civil aircraft are increasing!



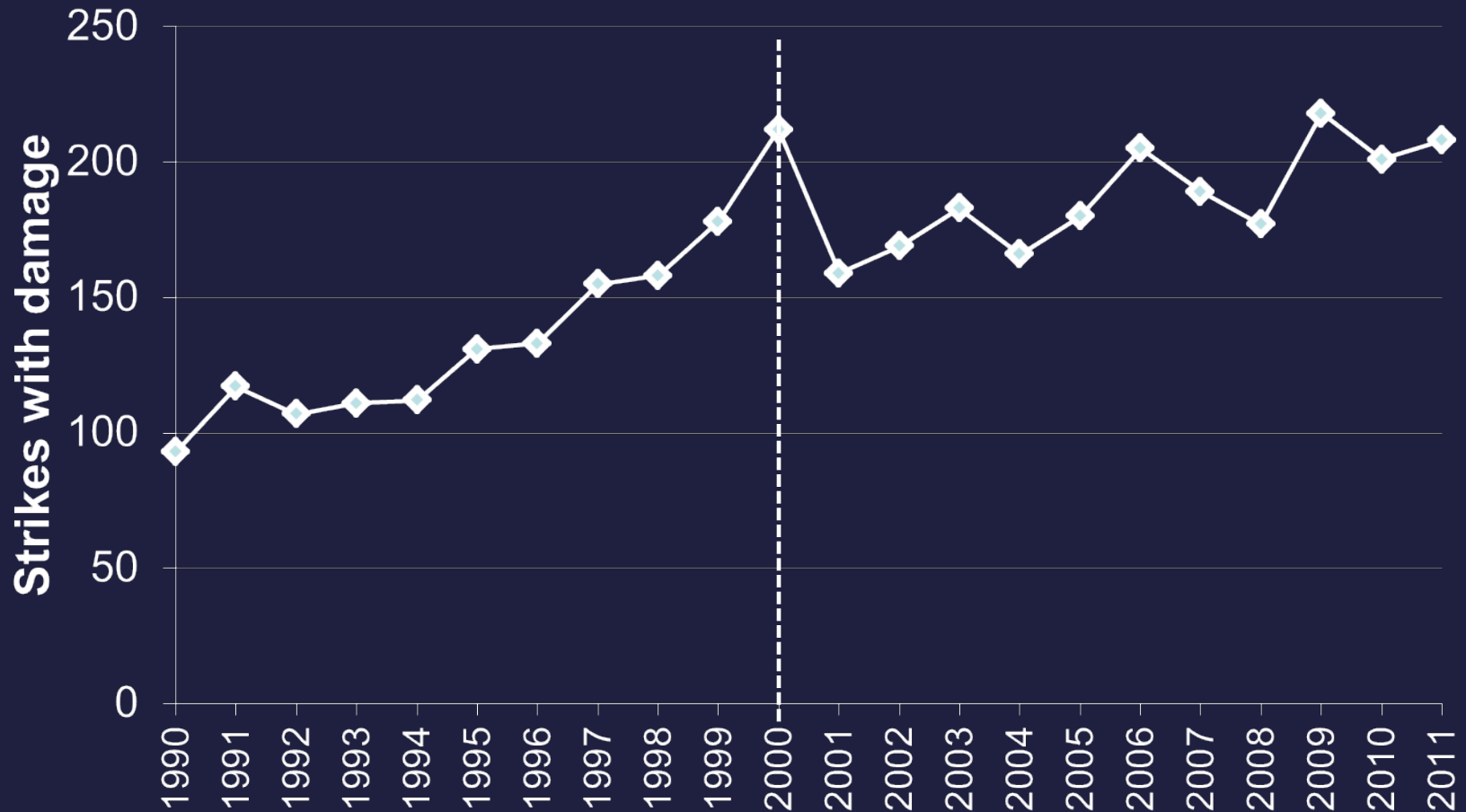
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Damaging strikes at civil airports (<500 ft AGL) are declining!



Damaging strikes at >500 ft AGL are not decreasing!



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